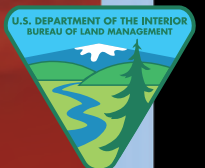


Exhibit D Index

BUREAU OF LAND MGMT., <i>Record of Decision and Approved Resource Management Plan</i> , DOI-BLM-UT-Y010-2008-0001-RMP-EIS (Oct. 2008) (“2008 RMP”)	Ex. D at 1 – 182
BUREAU OF LAND MGMT., <i>BLM Canyon Country District Announces Key Leadership Changes</i> (Aug. 11, 2022)	Ex. D at 183 – 87
KELSEY CRUICKSHANK & LAURA PETERSON, <i>Labyrinth Canyon Travel Planning: A New Opportunity to Solve Old Problems</i> , S. Utah Wilderness All.	Ex. D at 188 – 95
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BUREAU OF LAND MGMT., <i>Manual 8400 - Visual Resource Management</i> (Apr. 5, 1984)	Ex. D at 200 – 14
<i>Id.</i> at 4	Ex. at 203
BUREAU OF LAND MGMT., <i>Visual Resources Management (VRM)</i>	Ex. D at 215
BUREAU OF LAND MGMT., <i>Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons, Environmental Assessment: DOI-BLM-UT-Y010-2020-0068</i> (November 2020)	Ex. D at 216 – 315
<i>Id.</i> at 33	Ex. D at 248
<i>Id.</i> at 34	Ex. D at 249
<i>Id.</i> at 35	Ex. D at 250
<i>Id.</i> at 84	Ex. D at 299
BUREAU OF LAND MGMT., <i>Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons, REVISED Finding of No Significant Impact/Decision Record: DOI-BLM-UT-Y010-2020-0068</i> (June 2021)	Ex. D at 316 – 27
<i>Id.</i> at 6	Ex. D at 322
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Bureau of Land Management MOAB FIELD OFFICE

AND Record of Decision Approved Resource Management Plan



OCTOBER 2008

BLM Mission

To sustain the health, diversity, and productivity of the public lands
for the use and enjoyment of present and future generations.



Bureau of Land Management

BLM-UT-PL-09-001-1610

UT-060-2007-04



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
<http://www.blm.gov>



IN REPLY REFER TO:

1610

(UT-935)

Dear Reader/Interested Party:

I am pleased to announce that, after several years of hard work and collaborative efforts, the Moab Field Office Resource Management Plan (Approved RMP) is complete. This document will provide guidance for the management of over 1,821,000 acres of public land and 1,850,000 acres of Federal mineral estate administered by the Bureau of Land Management (BLM) in Grand and San Juan Counties in southeastern Utah.

The attached Record of Decision (ROD) and Approved RMP have been prepared in accordance with the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). The ROD/Approved RMP is available to members of the public and copies will be sent to pertinent local, State, Tribal, and Federal government entities. The Approved RMP finalizes the proposed decisions presented in the Proposed RMP/Final Environmental Impact Statement (FEIS) that was released on August 1, 2008 and subject to a 30-day protest period that ended on September 1, 2008. Twenty-one protest letters with standing were received. The protests were reviewed by the BLM Director in Washington, D.C. After careful consideration of all points raised in these protests, the Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the Proposed RMP/Final EIS. Minor adjustments or points of clarification are incorporated into the Approved RMP in response to issues raised in the protest process and final BLM review. These minor changes are discussed in the ROD under the section titled *Notice of Modifications and Clarifications*, but the protest review did not result in any significant changes from the Proposed RMP.

The approval of this ROD by the Department of the Interior (DOI) Assistant Secretary for Land and Minerals Management serves as the final decision by the DOI for all land use planning and implementation-level decisions described in the attached Approved RMP. Implementation of land use plan decisions (e.g., coal leasing, oil and gas development, and land and realty decisions) will not be undertaken without suitable further NEPA analysis, including all appropriate public involvement and any hearings available to the public.

Notification of the approval of this ROD/Approved RMP will be announced via local news releases and on the Moab Field Office website at:

<http://www.blm.gov/ut/st/en/fo/moab.html>

Hard copies and CD-ROM versions of the ROD and Approved RMP may be obtained by contacting the Moab Field Office by phone at (435) 259-2100, or at the following address:

Moab Field Office
82 East Dogwood
Moab, Utah, 84532

The BLM is pleased to provide this copy of the Moab Field Office ROD/Approved RMP for your reference. We greatly appreciate all who contributed to the completion of this Approved RMP, including the State of Utah and Grand and San Juan County governments who were our Cooperating Agencies on this plan over the years, as well as other Federal agencies that worked closely with us to complete this important effort. We also appreciate the extensive public involvement during this time by groups, organizations, and individuals. Public input informed and improved the planning documents and we hope you will continue to work with us as we implement the decisions in this Approved RMP.

Sincerely,



Selma Sierra
Utah State Director

**MOAB FIELD OFFICE
RECORD OF DECISION
AND
APPROVED
RESOURCE MANAGEMENT PLAN**

October 2008

Prepared by:

U.S. Department of the Interior
Bureau of Land Management
Moab Field Office
Moab, Utah

Cooperating Agencies:

State of Utah
Grand County
San Juan County

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LIST OF ACRONYMS

ACEC	Area of Critical Environmental Concern
AML	Abandoned mine lands
AMP	Allotment Management Plan
AMR	Appropriate Management Response
AMS	Analysis of the Management Situation
APE	Area of Potential Effect
ARPA	Archeological Resource Protection Act (of 1979)
AUM	Animal Unit Month
BA	Biological Assessment
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMP	Best Management Practice
BO	Biological Opinion
CAA	Clean Air Act (of 1970)
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second (a unit of water flow)
COA	Conditions of Approval
CSU	Controlled Surface Use
DEIS	Draft Environmental Impact Statement
DFC	Desired Future Condition
DOGM	(Utah) Division of Oil, Gas and Mining
DOI	(United States) Department of the Interior
DPC	Desired Plant Community
DWFC	Desired Wildland Fire Conditions
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPCA	Energy Policy and Conservation Act (of 1975)
ERMA	Extended Recreation Management Area
ESA	Endangered Species Act (of 1973)
ESR	Emergency Stabilization and Rehabilitation
FEIS	Final Environmental Impact Statement
FERC	Federal Energy Regulatory Commission
FLPMA	Federal Land Policy and Management Act (of 1976)
FMP	Fire Management Plan
FMZ	Fire Management Zone
FO	Field Office
FR	Federal Register
GIS	Geographic Information Systems
HMA	Herd Management Area
HMP	Habitat Management Plan
HUC	Hydrologic Unit Code
IBLA	Interior Board of Land Appeals

Moab Field Office Record of Decision and Approved Resource Management Plan – List of Acronyms

IMP	Interim Management Policy
IR	Indian Reservation
KPLA	Known Potash Leasing Areas
LTA	Land Tenure Agreement
LUP	Land Use Plan
LWCF	Land and Water Conservation Fund
MOU	Memorandum of Understanding
MFO	Moab Field Office
MPA	Moab Planning Area
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act (of 1990)
NEPA	National Environmental Policy Act (of 1969)
NHPA	National Historic Preservation Act
NOA	Notice of Availability (published in the Federal Register)
NOI	Notice of Intent (published in the Federal Register)
NPS	National Park Service
NRHP	National Register of Historic Places
NSO	No Surface Occupancy (a stipulation on an oil and gas lease)
NWSRS	National Wild and Scenic River System
OHV	Off-Highway Vehicle
ORV	Outstandingly Remarkable Value
PFC	Proper Functioning Condition (of riparian/wetland areas)
R&I	Relevance and Importance
R&PP	Recreation and Public Purposes (Act of 1926)
RAMP	Recreation Area Management Plan
RDCC	(Utah) Resource Development and Coordinating Committee
RFD	Reasonably Foreseeable Development
RHS	Rangeland Health Standards
RMP	Resource Management Plan (BLM land use plan under FLPMA)
RMZ	Recreation Management Zone
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
ROW	Right of Way
SHPO	State Historic Preservation Officer
SITLA	(Utah) School and Institutional Trust Lands Administration
SMA	Surface Management Agency
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
TCP	Traditional Cultural Property
T&E	Threatened and/or Endangered (species as per ESA of 1973)
UAAQS	Utah Ambient Air Quality Standards
UAC	Utah Administrative Code
UDAQ	Utah Department of Air Quality
UDEQ	Utah Division of Environmental Quality
UDOGM	Utah Division of Oil, Gas, and Mining

Moab Field Office Record of Decision and Approved Resource Management Plan – List of Acronyms

UDOT	Utah Department of Transportation
UDWQ	Utah Division of Water Quality
UDWR	Utah Division of Wildlife Resources
UGS	Utah Geological Survey
USFWS	United States Fish and Wildlife Service
USC	United States Code
VRM	Visual Resource Management
WSA	Wilderness Study Area
WSR	Wild and Scenic River(s) (Act of 1973)
WUI	Wildland Urban Interface

RECORD OF DECISION

A. INTRODUCTION

This Record of Decision (ROD) approves the Bureau of Land Management's (BLM's) proposal to manage the public lands within the Moab Field Office as presented in the attached Resource Management Plan (RMP). This RMP was described as the Proposed Plan in the August 2008 Proposed Moab RMP and Final Environmental Impact Statement (EIS) [USDI-BLM-2008] – with minor adjustments and clarifications which are explained later in this ROD. This ROD provides the background on development of the plan and rationale for approving the decisions contained in the Proposed Plan, and describes the clarifications and modifications made to address protests received on the plan. The attached Moab Field Office RMP (also referred to as the Approved RMP) includes the actual decisions.

Purpose and Need for the Plan

Purpose

The Federal Land Policy and Management Act (FLPMA) requires that the BLM "develop, maintain, and when appropriate, revise land-use plans" (43 United States Code [USC] 1712 [a]). The BLM has determined it is necessary to revise the existing land-use plan (LUPs) and prepare a new RMP for the Moab Field Office (MFO) based on a number of new issues that have arisen since preparation of the existing plans. In general, the purpose of this RMP is to provide a comprehensive framework for public land management within the MFO and its allocation of resources pursuant to the multiple-use and sustained yield mandate of FLPMA. In addition, the purpose of this plan revision is as follows:

- To consolidate the existing LUP and its amendments.
- To reevaluate, with public involvement, existing conditions, resources, and uses, and reconsider the mix of resource allocations and management decisions designed to balance uses and the protection of resources pursuant to FLPMA and applicable law.
- To resolve multiple-use conflicts or issues between resource values and resource uses. The resulting Approved RMP will establish consolidated guidance and updated goals, objectives, and management actions for the public lands in the decision area. The Approved RMP will be comprehensive in nature and will address issues that have been identified through agency, interagency, and public scoping efforts.
- To disclose and assess the direct, indirect, and cumulative impacts of the reasonably foreseeable future actions resulting from the management actions in the Approved RMP and draft alternatives pursuant to the requirements of the National Environmental Policy Act (NEPA), its implementing regulations, and other applicable laws.

Need

A revision to the 1985 *Grand RMP* is necessary because there have been many shifts in resources, health and demand, as well as modifications to policy since 1985. Circumstances and policies relevant to the future management of public lands and allocation of resources under the multiple-use and sustained yield mandate are of particular importance. The BLM completed detailed

evaluations of the 1985 *Grand RMP* in 2002 and determined the plan needed revision (BLM 2002).

Changes in the laws, policies, and regulations directing public land resource management and new information and resource data need to be considered to better manage the public lands. Visitation to the region has grown. Population demographics have changed, as have public awareness and use of lands within the planning area. Specifically, there is a need to evaluate management prescriptions and resource allocations to address the increases in recreation and visitor use, including scenic quality and open spaces, as well as the increased interest in oil and gas development. Land use plan decisions may be changed only through the amendment or revision process.

Moab Planning Area

The Moab planning area (MPA) is situated in the canyon, plateau, and desert areas of the Colorado Plateau physiographic province (Map 1). It is located in southeastern Utah and includes all of Grand County and the northern third of San Juan County. Geographically, the MPA is bounded by the Book Cliffs to the north, the Utah-Colorado state line to the east, Harts Point and Lisbon Valley to the south, and the Green River to the west. Major waterways within the MPA include the Colorado River, the Dolores River, and the Green River. Elevations within the MPA range from approximately 13,000 feet above mean sea level in the La Sal Mountains to approximately 3,900 feet above mean sea level at Mineral Bottom along the Green River.

The MPA encompasses Arches National Park, Dead Horse Point State Park, the La Sal Mountains of the Manti-La Sal National Forest, and abuts the Uintah/Ouray Indian Reservation. The MPA shares boundaries with lands administered by the BLM Richfield, Vernal, Monticello, Grand Junction, Uncompahgre, Dolores, and Price Field Offices, as well as with Canyonlands National Park.

The MPA comprises approximately 2,756,065 acres of land, of which approximately 1,822,562 acres is public land administered by the BLM (Table 1). In addition, the Moab Field Office also manages approximately 29,680 acres of subsurface mineral estate within the MPA and manages leasable minerals on 141,250 acres under U.S. Forest Service lands on the Manti-La Sal National Forest. The BLM Vernal FO presently manages 33,331 acres of public land at the top of the Book Cliffs along the northern portion of the MPA because access is easier to this area from the Vernal FO. Decisions for these 33,331 acres are contained in the Vernal RMP.

Table 1. Surface Ownership/Administration of Lands within the MPA (acres)

Ownership/Administration	Grand County	San Juan County	Total
BLM	1,529,390*	293,172	1,822,562*
Indian Lands	197,992	0	197,992
Department of Defense	1,631	0	1,631
National Park Service	76,396	0	76,396
Private	101,976	56,294	158,270
State Trust Lands	283,613	56,608	340,221
State Parks, County, City, Wildlife, and Outdoor Recreation Areas	16,339	1,068	17,407
USDA Forest Service	57,298	83,942	141,240
Acreage of Water	168	178	346
Total	2,264,803	491,262	2,756,065

*This total includes the 33,331 acres managed by the BLM Vernal FO.

Also contained within the MPA are several communities, diverse terrain, and scenic landscapes that figure prominently in the settlement, history, culture, and recreational enjoyment of southern Utah. Many occupational pursuits historically associated with this region of the Intermountain West—including farming, ranching, mining, tourism, retail trade, transportation, and construction—are still practiced by residents within the MPA. Major communities in the MPA are Moab, La Sal, Castle Valley, Thompson, Crescent Junction, and Elgin. Major transportation routes include Interstate 70 (I-70), U.S. Highway 191, and State Routes 279 (Potash State Scenic Byway), 128 (Colorado River State Scenic Byway), and 313 (Dead Horse Mesa State Scenic Byway).

B. OVERVIEW OF ALTERNATIVES

Four alternatives, including a No Action Alternative, were analyzed in detail in the Moab Draft RMP/EIS (USDI-BLM 2007) and in the Proposed RMP/FEIS (USDI-BLM 2008). The alternatives were developed to address major planning issues and to provide direction for resource programs influencing land management. All alternatives incorporated the *Utah Standards for Rangeland Health and Guidelines for Grazing Management* developed in conjunction with the Utah Resource Advisory Council (RAC) as base standards for assessing land health. All management under any of the alternatives would comply with federal laws, rules, regulations, and policies. Mitigation has been incorporated in the development of all alternatives.

Each alternative emphasized a different combination of resource users, allocations, and restoration measures to address issues and resolve conflicts among users, so program goals were met using a variety of approaches across the alternatives. Each alternative allowed some support of all resources present in the planning area. The alternatives differed in how fast the goals would be met, the degree to which they would be met, the emphasis placed on certain programs and activities, and whether active or passive management would occur. Management scenarios for programs not tied to major planning issues and/or mandated by law often contain minor or no differences in management between alternatives.

Alternative A (the No Action Alternative) is the continuation of the *1985 Grand RMP* (as amended) and is provided as a baseline for comparison. Alternative B is considered the environmentally preferable alternative, offering the most intensive, active management for protection of the area's natural and biological values and favors natural systems over commodities development, including protecting all non-WSA lands BLM found to have wilderness characteristics. Alternative D emphasizes commodity development and provides the greatest economic benefit from mineral development, and imposes the fewest restrictions on public land uses. Alternative C, (the Preferred Alternative in the Draft RMP/EIS and largely the baseline for the Proposed Plan in the PRMP/FEIS) best achieves a balance between environmental protection and use of public land resources. General overviews of these alternatives and comparisons among them are provided below.

Alternatives Considered in Detail

Alternative A is referred to as the No Action Alternative. This alternative would have continued present management practices defined in the existing land use plan. Direction contained in existing laws, regulations, and policies would have continued to be implemented, sometimes superseding provisions of the *Grand RMP*. Alternative A was not selected because it does not meet the purpose and need for the management of public lands in the MPA. The decisions in the 1985 RMP are largely based on outdated information. Equally important, these decisions do not meet changing uses, trends, and conditions that have occurred since that time. The *1985 Grand RMP* does not address many recent issues, nor does it address the increased levels of controversy some existing resource issues are facing. Special status species, including threatened and endangered species, are not fully addressed within the parameters of Alternative A. Alternative A designates 1,183,660 acres as open to OHV use. This large open acreage within the planning area (which now receives close to 2 million visitors) results in unacceptable resource damage which is contrary to BLM policy. In addition, the No Action Alternative does not designate ACECs, recommend suitable Wild and Scenic River segments, or consider natural areas to protect and preserve their wilderness characteristics.

Alternative B emphasizes protection of wildlife habitats, natural resources, ecosystems, and landscapes. Commodity production and human activities would be more constrained than in other alternatives. This alternative provides more opportunities for non-motorized recreation. Compared to all alternatives, Alternative B protects the most land area for sensitive resources, designates all potential Areas of Critical Environmental Concern (ACECs), makes all eligible river segments suitable for inclusion into the National Wild and Scenic River system, and protects, preserves and maintains all non-WSA lands with wilderness characteristics. It is also the most restrictive to OHV use and all surface disturbing activities (including oil and gas leasing). Although Alternative B is the environmentally preferable alternative, there are many uses that are overly restricted by the decisions in this alternative. The rationale for not selecting Alternative B is outlined below for the major management actions.

Lands and Realty - Utility Corridors: Alternative B provides a 100 foot wide utility corridor. The narrow width of this corridor provides maximum protection for resources such as soils, vegetation, and wildlife habitat but limits utility development and expansion. The opportunities and flexibility for the upgrading, addition, and expansion of utility needs are severely restricted by the narrow width of the utility corridor in this alternative.

In Alternative B, 671,444 acres are managed as exclusion areas for rights-of-way and 342,931 acres are managed as avoidance areas for rights of way. Managing 55 percent of the planning area with major restrictions on BLM rights-of-way for pipelines, roads and powerlines could severely limit development of and access to oil and gas leases as well as restricting the development of other necessary infrastructure.

Livestock Grazing: Alternative B removes the entire Professor Valley allotment from grazing in order to address a safety issue along Highway 128. Over 300,000 vehicles per year travel this stretch of highway and this volume of traffic is not compatible with open grazing. However, removing the entire allotment to solve the highway safety issue is unnecessarily restrictive.

Minerals: Alternative B manages oil and gas leasing and other surface disturbing activities with the following stipulations: Closed - 671,444 acres; No Surface Occupancy (NSO) - 342,931 acres; Timing Limitations/Controlled Surface Use - 543,751 acres; Open (subject to standard terms and conditions) - 264,344 acres. Alternative B is overly restrictive to oil and gas development and other surface disturbing activities, especially in areas with high development potential for oil and gas. It has the least amount of acreage open to oil and gas leasing. The acreage included in the Closed and No Surface Occupancy stipulation totals 55 percent of the acreage in the planning area and this acreage would be essentially unavailable to oil and gas development and other surface disturbing activities. The timing and controlled surface use stipulations in Alternative B would add another 30 percent of the planning area in which oil and gas development would be prohibited during certain times and subject to specified conditions for construction. Timing and controlled surface use restrictions add to the cost of development. In total, about 85 percent of the planning area would be subject to restrictions above standard terms and conditions for development. The Energy Policy and Conservation Act provides policy directing BLM to minimize impediments to oil and gas leasing and development, and this alternative does not meet these policy objectives as directed by Congress.

Alternative B provides the least amount of mineral royalty revenue (\$1,037,540) and the least amount of mineral property taxes (\$321,440) because of these restrictions on mineral development.

Non-WSA Lands with Wilderness Characteristics: Alternative B manages 266,471 acres to protect, preserve, and maintain their wilderness characteristics. These acres are closed to mineral leasing and development, rights-of-way, woodcutting, and all other surface disturbing activities. In addition, management of non-WSA lands to preserve their wilderness characteristics would preclude potentially beneficial actions such as fuels and vegetation treatments and other healthy land initiatives, wildlife and range improvements, and the construction of recreation facilities. Many of the areas managed to protect wilderness characteristics in Alternative B have conflicts with high development potential areas for oil and gas. Some of this acreage is also currently leased for oil and gas, making it impractical to protect wilderness characteristics values. The management of all the non-WSA lands with wilderness characteristics in Alternative B is overly restrictive on other resources and uses on the public lands.

Recreation: Alternative B establishes 11 Special Recreation Management Areas (SRMAs) which are managed to highlight non-motorized activities, generally. In addition, 20 Recreation

Management Zones (Focus Areas) within these SRMAs emphasize various types of non-motorized recreation. The Moab planning area is known for a multitude of recreational activities, attracting about 2 million visitors a year. These visitors engage in numerous activities not provided for in Alternative B, such as many forms of motorized activity (jeeping, dirt biking, ATVing) and specialized sports such as mountain bike freeriding and BASEjumping. Alternative B does not provide for the full range of recreational activities known to occur in the planning area or for the businesses that depend upon these activities.

Special Designations – Areas of Critical Environmental Concern: Alternative B designates all 14 areas determined to have relevant and important values as Areas of Critical Environmental Concern (ACECs). Management of 9 of these potential ACECs in Alternative B is unnecessary to protect the relevant and important values. For example, the relevant and important value of wildlife in the Cisco White-tailed Prairie Dog potential ACEC is protected in Alternative B by applying a no surface occupancy stipulation for oil and gas leasing and other surface disturbing activities on 117,481 acres of prairie dog habitat. Prairie dogs can be adequately safeguarded by using a protective buffer around identified prairie dog colonies. Another example of overly restrictive management in Alternative B is applying a no surface occupancy stipulation for oil and gas leasing and other surface disturbing activities to protect the scenic values in the Canyon Rims potential ACEC. Scenic values in this area can be sufficiently protected by the application of a controlled surface use stipulation that would mitigate visual impacts. In addition, many ACECs overlap WSAs where the relevant and important values are already protected through Interim Management Policy management. The multiple special designation layering is duplicative and unnecessary where relevant and important values are protected through Interim Management Policy management.

Special Designations – Wild and Scenic Rivers: Alternative B recommends as suitable all 29 river segments found eligible for potential designation as Wild and Scenic Rivers. Many of the river segments found suitable in Alternative B include scenery and river related non-motorized recreation as outstandingly remarkable values (ORVs). Scenery and non-motorized recreational activities, especially non-boating activities, are more amenable for management by other means, such as SRMAs, WSAs and management for non-WSA lands with wilderness characteristics. As a consequence, Alternative B would impose unnecessary restrictions that provide no additional management protections that are not otherwise available through existing or alternative management options.

Travel Management: Alternative B specifies the following OHV designations: 347,424 acres closed; 1,475,074 acres limited to designated routes and 0 acres for open OHV use. Although Alternative B provides for primitive recreation opportunities, it does not meet the needs of all recreational users. There are no open OHV areas provided for cross country motorized travel. In areas where OHV use is limited to designated roads and trails, there are no designated dirt bike routes, no new mountain bike singletrack trails, and new construction of mountain bike routes would not be allowed. In addition, Alternative B does not provide access to many popular recreational destinations and facilities. Therefore, Alternative B does not provide a travel plan that meets the needs of all recreational users. For details about route designations, see the Implementation Decisions, Section D, of the ROD.

Wildlife: Alternative B provides the maximum protection for wildlife habitats by considering the most broadly defined habitats for various species. In addition, Alternative B is the most restrictive to uses within these broader habitats. The timing limitations imposed in Alternative B are longer and cover larger acreages than are necessary for sustaining the species.

In summary, Alternative B would not provide adequate or balanced consideration of existing uses such as motorized recreational activities, economic land uses such as rights-of-way, energy corridors, or access to mineral development. Adoption of this alternative could also preclude the consideration of possible future development of renewable energy resources. Alternative B is inconsistent with existing state and local plans; conflicts with the intent of federal legislation including the Energy Policy and Conservation Act and the Energy Policy Act, and it does not give adequate accommodation of local needs, customs and culture.

Alternative C was selected as the BLM's Preferred Alternative in the Moab Draft RMP/EIS. This alternative represents the mix and variety of management actions, based on BLM's analysis and judgment, which best resolve the resource issues and management concerns while accommodating laws, regulations and policies pertaining to BLM management. As a result of public comment, internal review, and cooperating agency coordination on the Draft RMP/EIS, Alternative C was modified to become the Proposed Plan and analyzed in the Final EIS. With minor adjustments and clarification, upon signature of this Record of Decision, it becomes the Approved RMP.

Alternative D emphasizes commodity production and human activities. Commodity production and human activities would be less constrained in Alternative D. Alternative D, like Alternative A, designates no areas as ACECs, no suitable Wild and Scenic River segments, and no acres managed as non-WSA lands with wilderness characteristics. Other than Alternative A, Alternative D provides more opportunities for motorized recreation, and is the least restrictive to OHV use and all surface disturbing activities (including oil and gas leasing). Alternative D does not provide sufficient restrictions on uses to protect important natural resources. For these reasons, this alternative did not achieve the balance between resource protection and resource use that provided enhancement of resource use and conditions. The rationale for not selecting Alternative D is outlined below for the major management actions.

Lands and Realty - Utility Corridors: Alternative D provides a 5,280 foot wide utility corridor. The width of this corridor provides maximum flexibility for utility companies but could result in extensive potential impacts to resources such as soils, vegetation, and wildlife habitat as a result of utility development.

In Alternative D, 350,219 acres (all within WSAs) are managed as exclusion areas for rights-of-way and 84,772 acres are managed as avoidance areas for rights of way. The exclusion areas for WSAs are non-discretionary, and the 84,772 acres of avoidance areas are not sufficient to adequately protect the important natural resources that have been identified within the planning area. In particular, the exclusion and avoidance areas in Alternative D are not sufficient to protect the municipal watersheds of Moab and Castle Valley, highly sensitive visual resources, heavily used recreation areas, bighorn sheep migration, lambing, and rutting habitats, and the relevant and important values in potential ACECs.

Livestock Grazing: Alternative D allows grazing on 79,833 acres that have been identified as having conflicts with wildlife, special status species, riparian habitat, watershed health and recreation. Alternative D was not selected because, under this alternative, these issues would remain unresolved.

Minerals: Alternative D manages oil and gas leasing and other surface disturbing activities with the following stipulations: Closed – 350,219 acres (all non-discretionary since it is entirely within WSAs); No Surface Occupancy – 84,772 acres; Timing Limitations/Controlled Surface Use -590,442 acres; Open (subject to standard terms and conditions) - 797,031 acres. Alternative D is the least restrictive to oil and gas leasing and other surface disturbing activities. Alternative D has the most acreage open subject to standard terms and conditions. Although the oil and gas restrictions are more conducive to development, they are not sufficient to protect the important resources identified within the planning area. In particular, the NSO acreage in Alternative D is not sufficient to protect the municipal watersheds of Moab and Castle Valley, highly sensitive visual resources, heavily used recreation areas, bighorn sheep migration, lambing, and rutting habitats, and the relevant and important values in potential ACECs.

Non-WSA Lands with Wilderness Characteristics: Alternative D does not manage any non-WSA lands to protect, preserve, and maintain their wilderness characteristics. Therefore, all the wilderness values identified in these areas could be potentially adversely affected.

Recreation: Alternative D establishes six SRMAs which are managed to emphasize motorized activities. The Moab planning area is known for a multitude of recreational activities, attracting about 2 million visitors a year. These visitors engage in numerous non-motorized activities not specifically provided for in Alternative D such as hiking, rafting, horseback riding, backpacking, and mountain biking. The seven recreation focus areas managed under Alternative D do not provide sufficient opportunities for these popular non-motorized activities.

In Alternative D, in many heavily used recreation areas such as Labyrinth Rims/Gemini Bridges, the Dolores River Canyons, Lower Gray Canyon, and the South Moab area there is no SRMA management, and consequently no focus areas. As a result, recreation use and opportunities would not be proactively or adequately managed resulting in continued degradation of the resources in these areas. Alternative D does not provide for the full range of recreational activities known to occur in the planning area or for the businesses that depend upon these activities.

Special Designations – ACECs: Alternative D does not designate any of the 14 areas determined to have relevant and important values as ACECs. The management prescriptions detailed under Alternative D are not sufficient to protect the majority of the relevant and important values of these potential ACECs. For example the relevant and important value of scenery in the Shafer Canyon ACEC is managed as VRM Class III under Alternative D. This visual management class is not sufficient to protect the scenic values of one of the most photographed landscapes in the state of Utah, the lands below Dead Horse Point State Park.

Special Designations – Wild and Scenic Rivers: Alternative D recommends none of the eligible river segments as suitable for potential designation as Wild and Scenic Rivers. As a result, Alternative D would not provide adequate protection to many of the eligible river segments. The free-flowing nature of the eligible river segments could be jeopardized and the outstandingly remarkable values identified for many of these segments could be subject to adverse impacts from oil and gas development and other surface disturbing activities.

Travel Management: Alternative D specifies the following OHV designations: 57,351 acres closed, 1,762,083 acres limited to designated routes, and 3,064 acres open to cross country OHV use. The open cross country OHV acreage in the White Wash Sand Dune area extends beyond the unvegetated sand dunes and would result in degradation to soils, vegetation, visual, and wildlife resources. Alternative D designates user-made dirt bike and mountain bike trails in areas with sensitive natural resources. In addition, it designates routes that intrude upon primitive recreational opportunities in both WSAs and other areas used heavily by hikers. While this alternative accommodates many motorized travel opportunities, it conflicts with areas used for primitive recreation and thus does not provide a Travel Plan that meets the needs of all recreational users. For details about route designations, see the Implementation Decisions in Section D of the ROD.

Wildlife: Alternative D provides the least protection for wildlife habitats by considering the smallest acreages as habitat for various species and the minimum in timing limitations. The timing limitations imposed in Alternative D are shorter and cover less acreage than necessary for sustaining the species. For example, 46,319 acres of the 130,419 acres identified by the Utah Division of Wildlife Resources and the BLM as desert bighorn sheep habitat are protected in Alternative D with a minimal timing limitation. Alternative D does not provide sufficient protection for wildlife habitats.

In summary, Alternative D was not selected primarily because it does not best achieve the mix of multiple uses necessary to fully implement the mandate of FLPMA. Adoption of this alternative would result in adverse impacts to wildlife, loss of primitive recreation opportunities, and would have reduced management flexibility by foregoing a number of special designations such as ACECs, and WSRs. In addition, recreational opportunities provided through SRMA-focused management and the management of non-WSA lands with wilderness characteristics would be foregone.

Alternatives Considered but Eliminated from Analysis

Livestock Grazing Adjustments Alternative

During scoping and public comment on the Draft EIS, it was suggested that BLM consider adjustments to livestock numbers, livestock management practices, and the kind of livestock grazed on allotments within the Moab Field Office to benefit wildlife and protect and promote land health including soils, hydrologic cycles and biotic integrity.

BLM policy regarding adjustments to the levels of livestock use authorized is to monitor and inventory range conditions under existing stocking levels and make adjustments to livestock use as indicated by this data to help assure that Rangeland Health Standards (RHS) and resource objectives are met. Regulations at 43 CFR 4130.3 require that the terms and conditions under

which livestock are authorized “ensure conformance with the provisions of subpart 4180” (Standards for Rangeland Health) and further that “livestock grazing use shall not exceed the livestock carrying capacity of the allotment.” It would be inappropriate and unfeasible to estimate and allocate the available forage, design specific management practices and determine if changes to the kind of livestock are necessary for each allotment in the Moab Field Office or in the area as a whole in the RMP/EIS. Such changes would not be supportable considering the type and amount of data required and the analysis necessary to make such changes.

According to BLM policy, decisions regarding authorized livestock use levels and the terms and conditions under which they are managed are implementation decisions (H-1610-1, Appendix A, page 15). BLM assesses RHS, conducts monitoring and inventories, and evaluates these data on a periodic basis, normally on an allotment and/or watershed basis. After NEPA analysis, necessary changes to livestock management and implementation of Utah’s Guidelines for Rangeland Management are implemented through a proposed decision in accordance with 43 CFR 4160. These decisions determine the exact levels of use by livestock in conformance with the LUP and to meet resource objectives and maintain or enhance land health. For these reasons this alternative has been dismissed from further consideration in this land use plan revision.

No Grazing Alternative

An alternative that proposes to make the entire planning area unavailable for grazing would not meet the purpose and need of this Approved RMP. The National Environmental Policy Act (NEPA) requires that agencies study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources. No issues or conflicts have been identified during this land-use planning effort which requires the complete elimination of grazing within the planning area for their resolution. Where appropriate, removal of livestock and adjustments to livestock use have been incorporated into the alternatives on an allotment or area basis to address issues identified in this planning effort. Since the BLM has considerable discretion through its grazing regulations to determine and adjust stocking levels, seasons-of-use, and grazing management activities, and to allocate forage to uses of the public lands in RMPs, the analysis of an alternative to entirely eliminate grazing is not needed.

An alternative that proposes to make the entire planning area unavailable for grazing would also be inconsistent with the intent of the Taylor Grazing Act, which directs the BLM to provide for livestock use of BLM lands, to adequately safeguard grazing privileges, to provide for the orderly use, improvement, and development of the range, and to stabilize the livestock industry dependent upon the public range.

The Federal Land Policy and Management Act (FLPMA) requires that public lands be managed on a "multiple use and sustained yield basis" (FLPMA Sec. 302(a) and Sec. 102(7)) and includes livestock grazing as a principal or major use of public lands. While multiple use does not require that all lands be used for livestock grazing, complete removal of livestock grazing on the entire planning area would be arbitrary and would not meet the principle of multiple use and sustained yield.

Livestock grazing is and has been an important use of the public lands in the planning area for many years and is a continuing government program. Although the Council on Environmental Quality (CEQ) guidelines for compliance with NEPA requires that agencies analyze the No Action Alternative in all EISs, for purposes of this NEPA analysis, the No Action Alternative is to continue the status quo, which includes livestock grazing (CEQ Forty Most Asked Questions, Question 3). For this reason and those stated above, a no grazing alternative for the entire planning area has been dismissed from further consideration in this RMP/EIS.

No Leasing Alternative

During scoping and/or the comment period for the DRMP/EIS, it was suggested that BLM should address a “No Leasing Alternative” because the “No Leasing Alternative” is the equivalent of the “No Action Alternative” that must be analyzed in all EISs.

The “No Leasing Alternative” in an RMP revision is actually an action alternative because where lands have already been leased, the no action for NEPA purposes continues to allow for (honor) valid existing rights. Proposing a “No Leasing Alternative” would require revisiting existing leases and either buying them back from the lessee, or allowing them to expire on their own terms. The first option (buying back), is outside the scope of any RMP. This is a political decision that BLM has no authority to undertake in planning. As a result, BLM does not regularly include a “No Leasing Alternative.”

The purpose and need for the land use plan is to identify and resolve potential conflicts between competing resource uses rather than to eliminate a principle use of the public lands in the Moab Field Office area. Leasing of the public lands for oil and gas exploration and production is required by the Mineral Leasing Act of 1920, as amended, and BLM’s current policy is to apply the least restrictive management constraints to the principal uses of the public lands necessary to achieve resource goals and objectives. A field office-wide “No Leasing Alternative” would be an unnecessarily restrictive alternative for mineral exploration and production on the public lands.

The National Environmental Policy Act (NEPA Section 102 (E)) requires that agencies “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternatives uses of available resources.” No issue or conflicts have been identified during this land use planning effort which requires the complete elimination of oil and gas leasing within the planning area for their resolution. The BLM’s Land use Planning Handbook (BLM Manual Rel. 1-1693), Appendix C, item H, requires that land use plans identify areas as open or unavailable for leasing.

Given the potential range of decisions available in the DRMP/DEIS, the analyzed alternatives include no leasing for certain areas; but a field office-wide “No Leasing Alternative” is not necessary in order to resolve issues and protect other resource values and uses.

As mentioned in the no grazing discussion, a “No Leasing Alternative” should not be confused with the “No Action Alternative” for purposes of NEPA compliance. Leasing and No Leasing on the public lands has previously been analyzed in several NEPA documents. In 1973, the Department of Interior published the Final Environmental Impact Statement on the Federal Upland Oil and Gas Leasing Program (USDI, 1973). The proposed action was to lease Federal

lands for production of oil and natural gas resources. Alternatives included in the No Action Alternative, which at initiation of the program was “No Leasing.” To supplement that EIS, the BLM prepared a series of Environmental Assessments (then titled “Environmental Analysis Records or EARs”) including the Grand Resource Area Oil and Gas Program Environmental Analysis Record (EAR), 1988 which addressed oil and gas leasing for the public lands in the Moab Field Office area. Alternatives again included the No Action or “No Leasing” alternative. The outcome was a category system for leasing which categorized all public and Forest Service lands into four groups: 1) open to leasing with standard lease stipulation, 2) special stipulations to address special concerns, 3) no surface occupancy and 4) no leasing. Since completion of the EAR in 1988, oil and gas leasing in the Moab Field Office area has been an ongoing federal program under the established categories.

The Council on Environmental Quality (Section 1502.14(d) of NEPA) requires the alternatives analysis in an EIS to “include the alternative of no action,” but explains that there are two distinct interpretations of “no action” that must be considered, depending on the nature of the proposal being evaluated. “The first situation might involve an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases “no action” is “no change” from current management direction or level of management intensity. To construct an alternative that is based on no management at all would be a useless academic exercise. Therefore, the “no action” alternative may be thought of in terms of continuing with the present course of action until that action is changed.” (CEQ Forty Most Asked Questions, Question 3). Therefore, for the MFO DRMP/DEIS, the “No Action Alternative” continues the *status quo* which is to lease under the oil and gas stipulations (formerly categories) established in the Grand Resource Area RMP.

The Red Rock Heritage Travel Plan Alternative

An alternative that proposes to remove nearly all travel routes from areas proposed for wilderness by external groups from the Travel Plan that would accompany this RMP would not meet the purpose and need of the Approved RMP. NEPA requires that agencies study, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.

On September 7, 2004, BLM received a Travel Plan alternative from Red Rock Heritage (RRH). The narrative explains the philosophy and objectives underlying its plan and offers rationale for not designating specific routes for motorized travel within the BLM Travel Plan. RRH emphasizes that the primary objective of its plan is a “fair allocation of recreational opportunities” between motorized and non-motorized uses. RRH specifically states that the best practical alternative for comparing travel plans on this dimension is by “measuring the percentage of the field office area within various distances of the nearest motorized trail.” RRH suggests that the appropriate percentage to achieve this goal is approximately 25 percent.

Near the end of the narrative, RRH provides data with such computations at varying distances from motorized routes, contrasting its plan with the BLM-verified Grand County inventory. The Grand County inventory has 2,000 more miles of routes identified than is in the Grand County

Travel Plan. BLM adopted the Grand County Travel Plan as its baseline for this land use planning effort, and it is used as the comparison for RRH.

The BLM agrees with RRH that an equitable allocation between non-motorized and motorized recreation is a desirable outcome of the BLM Travel Plan. BLM believes, however, that the RRH plan is not a viable alternative, for several reasons:

The RRH plan's roadless polygons match almost identically with wilderness proposals submitted by Southern Utah Wilderness Alliance (SUWA) and/or other interest groups. To achieve this "roadlessness," RRH has recommended for closure virtually all roads within these proposed wilderness polygons, without specific mention or regard for purpose and need.¹ This results in several hundred miles of County "B" roads being recommended for closure. BLM has determined that these roads, which are constructed, regularly maintained by mechanical means, and serve specific purposes and needs, should be included in all alternatives of the BLM Travel Plan.

RRH includes School & Institutional Trust Lands Administration (SITLA) in all its analyses. BLM cannot manage travel on SITLA lands, and BLM confines its analysis to public lands managed by the MFO.

RRH focuses its analyses on lands south of I-70, which leaves out those portions of the MPA where opportunities for non-motorized recreation are most available. BLM believes this division is arbitrary, and will focus its analyses on the entire MPA.

RRH analyses are done only in comparison to the Grand County route inventory. BLM's analyses will encompass the travel plans carried forward under the alternatives considered in the Draft EIS.

RRH states that any travel plan presented as an alternative to its plan should "achieve the same degree of balance (i.e., 25 percent of the MPA more than a mile from a road, 12 percent more than two miles, etc.)." BLM agrees that an equitable allocation between motorized and non-motorized use is a desirable outcome of the BLM travel plan. However, the BLM cannot justify using an arbitrary percentage to achieve this goal.

RRH uses only a portion of what is commonly referred to as the Recreation Opportunity Spectrum (ROS). RRH limits its ROS analysis to physical separation, but ROS also looks at such facets as topography and social interactions (e.g., likelihood of meeting others) within the broader analysis. The MFO chose not to use ROS as a management tool for decision making in this RMP because the varied topography of the MPA results in ROS analysis, using physical separation only, misrepresenting opportunities for primitive, non-motorized recreation. The RRH Travel Plan mirrors the Red Rock Wilderness proposal, which encompasses over 46 percent of public lands in the MPA. RRH assumes that if currently available motorized routes were eliminated, these areas would be eligible for the protection of their wilderness characteristics.

¹ Per BLM Instruction Memorandum 275, Change 1 (9/29/03), BLM is prohibited from establishing new wilderness areas. BLM *may* choose to manage certain areas to protect wilderness characteristics, but is not required to do so.

In its narrative, RRH discusses numerous specific routes, as well as areas, that it recommends that BLM not designate as available for motorized travel. Rather than discuss each route or area individually, several general comments are appropriate:

- Almost all of these routes and areas lie within RRH wilderness proposals. In its comments, there is repeated emphasis on the need to set aside areas for non-motorized recreation and, if necessary, to "create a rare remote and wild area." Current BLM policy prohibits the creation of new wilderness study areas, although it does allow managing areas to protect wilderness characteristics. Several of the areas cited in RRH's proposal were found by BLM in 1999 to lack wilderness character. Many of the specific routes identified by RRH were either described as roads in the BLM 1999 inventory or described as roads at the time of the establishment of the original WSAs. Roads, by definition, are an impact on wilderness characteristics.
- Other resource concerns are usually mentioned (e.g., wildlife, sensitive soils, riparian), but no specific data is presented to support the contention (unstated) that a particular existing route is causing the problem cited.
- Several of the routes specified are county B roads, which are constructed and maintained and receive regular use.

For the reasons outlined above, the RRH Travel Plan in total is eliminated from further analysis.

C. RESULTS OF PROTEST PERIOD

The BLM received 21 protest letters with standing during the 30-day protest period provided on the proposed land use plan decisions contained in the Moab Proposed RMP/Final EIS in accordance with 43 CFR Part 1610.5-2. Of these, 13 letters from organizations presented valid protest points. Protesting parties with valid protests included:

San Juan County Commission; Utah Rivers Council; Western Watersheds Project, Inc.; Colorado 500 Legal Defense Fund and Colorado Off-Highway Vehicle Coalition; The Center for Water Advocacy; Colorado Plateau Archaeological Alliance; ECOS Consulting; Campbell Hansmire Sheep Akbash Dogs; Blue Ribbon Coalition, Inc.; Independent Petroleum Association of Mountain States; Sierra Club Utah Chapter; Gurney & Gurney, LLC; Southern Utah Wilderness Alliance (SUWA), Center for Native Ecosystems, The Wilderness Society (TWS), Grand Canyon Trust, Red Rock Forests, Sierra Club - Utah Chapter, Great Old Broads for Wilderness, Public Employees for Environmental Responsibility (PEER) - Southwest Chapter.

Protest issues were varied. Numerous protests centered on whether or not BLM followed the NEPA regulations in completing the land use planning effort. Issues specifically related to a lack of detailed impact analysis for numerous resources, lack of an adequate range of alternatives, and a lack of opportunities for public involvement. Other issues identified that the land use plan did not meet FLPMA's multiple use mandate or give priority to the designation of ACECs. In addition, protests declared that BLM did not adequately analyze effects of planning actions on air quality or appropriately analyze impacts of climate change. Some protestors did not feel that their comments and/or submitted information provided on the Draft RMP/Draft EIS were satisfactorily responded to in the Proposed Plan/Final EIS.

Detailed information on protest response can be found on the BLM Washington Office Website at: http://www.blm.gov/wo/st/en/prog/planning/protest_resolution.html

The BLM Director addressed all protests without making significant changes to the Proposed RMP/Final EIS. One protest was granted in part, resulting in modifications to the decisions in the Approved RMP. In addition, minor adjustments and clarifications were made and have been explained in the *Notice of Minor Modification and Clarification* section later in this ROD.

D. THE DECISION

The decision is hereby made to approve the attached plan as the Approved Resource Management Plan (RMP) for management of public lands that are administered by the BLM's Moab Field Office (see Approved RMP). The Approved RMP replaces public land decisions in the *Grand Resource Area Resource Management Plan* approved in 1985, and amendments thereto (USDI, BLM 1985).

The Approved RMP was prepared under the authorities of the Federal Land Policy and Management Act (FLPMA) of 1976 in accordance with the BLM planning regulations (43 CFR Par 1600). An Environmental Impact Statement (EIS) was prepared for this RMP in compliance with the National Environmental Policy Act (NEPA) of 1969.

The Approved RMP is nearly identical to the Proposed Plan presented in the Proposed RMP/Final EIS. Management decisions and guidance for public lands under the jurisdiction of the Moab Field Office are presented in the Approved RMP. All decisions covered by the ROD are either land use planning decisions or implementation decisions, and are effective upon signature of the ROD.

The Approved RMP emphasizes an appropriate multiple-use balance of protection and restoration of the natural and cultural resources while providing for resource use, extraction, and enjoyment. The Approved RMP is considered the appropriate plan of action when taking into consideration the social, economic and natural environments. The Approved RMP supports the six broad policy goals for all Federal plans, programs, and policies:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

What the Decision/RMP Provides

Land use plan decisions include:

- Goals
- Objectives (Desired Future Conditions)
- Land Use Allocations
- Management Actions

Goals are the broad statements of desired outcomes, and are usually not quantifiable.

Objectives are specific desired conditions, usually quantifiable and measurable, and may have timeframes for achievement.

Land use allocations specify locations within the planning area that are available or not available for certain uses. These include decisions such as what lands are available for livestock grazing, mineral material use, oil and gas leasing, and locatable mineral development, what lands may be available for disposal via exchange and/or sale, and what lands are open, closed, or limited to motorized travel (please note that all acreages presented in the Approved RMP are estimations even when presented to the nearest acre).

Management actions include those provisions that help in meeting the established goals and objectives and include measures that will be applied to guide day-to-day activities on public lands, including but not limited to stipulations, guidelines, best management practices (BMPs), and design features.

The primary management decisions in the Approved RMP are to:

- Designate five Areas of Critical Environmental Concern (ACECs) and manage them according to the special management prescriptions identified for each area.
- Designate 11 river segments as suitable for consideration as part of the National Wild and Scenic River system and manage such segments to protect the free flowing nature and outstandingly remarkable values.
- Protect, preserve, and maintain the wilderness characteristics on non-WSA lands for 47,761 acres in three areas.
- Manage 11 Wilderness Study Areas as VRM Class I and either closed or limited to designated ways for OHV use.
- Conduct proactive cultural inventories under Section 110 of the National Historic Preservation Act.
- Place BLM-administered lands in fire management categories.
- Designate areas as Limited, Closed, or Open to off-highway vehicle use:
 - ♦ Designate 1,481,334 acres as limited to off-highway vehicle use,
 - ♦ Designate 339,298 acres as closed to off-highway vehicle use,
 - ♦ Designate 1,866 acres in 1 area as open to cross country off-highway vehicle use.

- Designate 10 Special Recreation Management Areas (SRMAs) and identify 30 recreation management zones (Focus Areas).
- Establish which lands are available or unavailable to mineral leasing:
 - ♦ Make an estimated 1.45 million acres of the 2.76 million acres of the federal mineral estate available for oil and gas leasing.
 - ♦ Make an estimated 427,273 acres available for oil and gas leasing under standard lease terms; an estimated 806,994 acres are available subject to Controlled Surface Use or Timing Limitation stipulations; and an estimated 217,480 acres are available subject to a No Surface Occupancy (NSO) stipulation.
 - ♦ Make approximately 370,250 acres unavailable for oil and gas leasing.
- Designate 370,250 acres as exclusion areas for rights-of-way and 217,480 acres as avoidance areas for rights-of-way.
- Designate the I-70 and Moab Canyon utility corridors. Combine the two corridors south of Spanish Valley into a single corridor.
- Continue the existing withdrawal of approximately 78,333 acres from locatable mineral entry.
- Establish which areas are available or unavailable to livestock grazing:
 - ♦ Make an estimated 1,690,481 acres available to livestock grazing and an estimated 132,047 acres not available to livestock grazing.
- Protect the Castle Valley (10,321 acres) and Mill Creek-Spanish Valley (9,667 acres) watersheds by precluding surface disturbing activities.
- Minimize watershed damage to sensitive soils in the Mancos Shale (330,142 acres) by applying timing limitations on surface disturbing activities.
- Protect the special status species habitats of the Greater sage-grouse (3,068 acres), Gunnison sage-grouse (175,727 acres), white-tailed prairie dog (117,481 acres), and Gunnison prairie dog (10,700 acres).
- Protect the big game habitats of pronghorn (293,741 acres), desert bighorn sheep (101,897 acres), Rocky Mountain bighorn sheep (194,560 acres), and deer and/or elk (349,955 acres).
- Designate the following VRM management classes:
 - ♦ Designate 358,911 acres as VRM Class I,
 - ♦ Designate 365,566 acres as VRM Class II,
 - ♦ Designate 829,158 acres as VRM Class III,
 - ♦ Designate 268,133 acres as VRM Class IV.
- Prohibit wood harvest and wood gathering on 652,386 acres to protect resource values.

What the Decision/RMP Does Not Provide

The Approved RMP does not contain decisions for the mineral estates of land administered by the BLM Moab Field Office for Forest Service lands located in the planning area, for lands under the jurisdiction of other Federal agencies, or for private or State-owned lands and minerals.

RMP decisions for the surface estate only apply to BLM managed lands, even where these private or state lands are shown on a map included in the RMP.

- The Approved RMP does not affect valid existing rights.

- It does not create new wilderness or Wilderness Study Areas (WSAs). Existing WSAs continue to be managed under the *Interim Management Policy for Lands under Wilderness Review*.
- The existing Three Rivers Withdrawal continues under the Approved RMP.
- “Closed routes” are not closed for administratively approved activities.
- The Approved RMP does not adjudicate, analyze, or otherwise determine the validity of claimed rights-of-way. However, the State of Utah’s statutory policy is to “use reasonable administrative and legal measures to protect and preserve valid existing rights-of way granted by Congress under R.S. 2477,” (Utah Code 63J-4-401(7)(b)). The BLM is committed to working with the State to employ potential options to recognize existing rights-of-way in accordance with Washington Office Instruction Memorandum 2008-174 and 2008-175. BLM recognizes that it would be beneficial to meet and discuss Non-Binding Determinations and Recordable Disclaimer of Interest options which would result in the BLM documenting its position in its official records, after public notification and involvement. BLM will work with the State and counties to set priorities for specific roads. It is BLM’s intent to work toward an outcome that is in the interest of the general public and the State of Utah.
- The Approved RMP does not affect terms of existing leases, commercial recreation permits, or other permits issued by the BLM.

In addition, many decisions are not appropriate at this level of planning and are not included in the ROD. Examples of these types of decisions include:

Statutory requirements: The Approved RMP will not change the BLM’s responsibility to comply with applicable laws, rules, and regulations.

National policy: The Approved RMP will not change BLM’s obligation to conform with current or future national policy.

Funding levels and budget allocations: These are determined annually at the national level and are beyond the control of the Field Office.

Implementation Decisions

While the designation of areas as Open, Closed, or Limited to off-highway vehicle use is a land use planning decision, the proposed route designations for motorized wheeled travel in the planning area (included the Proposed RMP/Final EIS) are implementation decisions.

The route designations described in the *Travel Management* section of the Approved RMP and identified on Map 2, Map 3 and Map 4 are effective upon issuance of this Record of Decision (ROD). All area designations are complete upon signature of the ROD in accordance with 43 CFR 8342.3(b).

Designation of specific vehicle routes for the Approved RMP was undertaken addressing each route’s purpose and need and weighing the purpose and need against potential resource conflicts. Routes were not designated in the Approved RMP where it was determined that the routes have no purpose and need or where resource conflicts outweighed the purpose and need. Twenty one interdisciplinary team meetings were held and included representatives of Grand and San Juan

Counties, to evaluate all the routes inventoried within the planning area. About 6,199 miles of routes were inventoried as baseline and considered for designation. Each route segment was evaluated for purpose and need and resource conflicts. A total of 2,079 miles of routes were determined to have no purpose and need and are not designated for motorized travel. An additional 427 miles of routes were determined to have resource conflicts that outweighed the purpose and need for the route. Therefore, these 427 miles of routes are not designated for motorized travel. The identified resource conflicts and the miles of routes not designated in the Approved RMP are as follows: cultural – 16.6 miles; non-motorized recreation – 59.8 miles; riparian – 50.1 miles; soils – 167.5 miles; wilderness values - 80.8 miles; wildlife – 51.8 miles. The route evaluation process resulted in the designation of 3,693 miles of full sized vehicle routes in the Approved RMP. The same process was followed for routes submitted by the public for motorcycles, All Terrain Vehicles (ATVs), and bicycles resulting in the designation of 313 miles of routes for motorcycles (and in some cases ATVs) and 22.5 miles of bicycle singletrack trails in the Approved RMP.

Some routes designated in the Approved RMP are disputed by groups favoring non-motorized recreation. The most controversial route is the 18 mile long Ten Mile Wash route, which is a designated route in the Approved RMP. Although very popular with motorized users, the route poses potential resource conflicts with cultural resources, wildlife, and riparian resources. The area has experienced off-route vehicle travel in the past which has resulted in impacts primarily to riparian and vegetation resources. The BLM has found that the resource impacts can be mitigated by clearly signing and flagging the desired route on the ground. Other controversial routes that are designated in the Approved RMP include the Hey Joe route along the Green River and a route within Hellroaring Canyon. These two routes pose potential resource conflicts with non-motorized recreationists and riparian areas. However, the routes were determined to have an overriding purpose and need in that they are identified in guidebooks or are part of the Moab Jeep Safari route system. External groups also dispute the BLM's designation of routes in areas such as Deadman Point and Mineral Point, citing conflicts with non-motorized recreation and wilderness characteristics. In the Approved RMP, the BLM has chosen not to manage for these values which essentially remove the resource conflicts.

There are routes not designated in the Approved RMP which are disputed by groups favoring motorized recreation. One route crosses over the top of the Gemini Bridges. Motorized travel to and over the natural bridges has resulted in resource damage to vegetation, soils, and visual resources as well as in conflicts with non-motorized users. The BLM has designated the route as non-motorized and non-mechanized in order to mitigate these resource conflicts. Other controversial routes not designated in the Approved RMP include the user-made motorcycle routes on Duma Point and Hidden Canyon Rim. The former route has wildlife resource conflicts with bighorn sheep escape terrain and the latter route has cultural resource conflicts.

Inventoried routes within the 11 existing Wilderness Study Areas (349,824 acres) total 82.5 miles. Out of these miles, 80.8 miles are not designated for motorized travel in the Approved RMP. The remaining 1.7 miles of inventoried routes, consisting of 2 ways in 2 different Wilderness Study Areas (WSAs), are designated in the Approved RMP because they were considered to have an overriding purpose and need. The first route (0.9 miles on the southeast corner of the Behind the Rocks WSA) provides access to two named arches which are popular

destination points. The second route (0.8 miles on the west side of the Lost Spring Canyon WSA) is a permitted Jeep Safari route. These two routes have not resulted in threats to wilderness values and are continually monitored. They will continue to be monitored to ensure that impairment of wilderness values does not occur.

In the Approved RMP, a total of about 8 miles of routes are designated within areas specified as non-WSA lands with wilderness characteristics. These routes provide access to destination points which include overlooks and the confluence of Fisher Creek and the Dolores River. These routes were found not to have a negative effect on the wilderness characteristics in the area because travel on them is very light and the topographical relief found in the area makes them largely unnoticeable.

Many comments were submitted on the Draft RMP/EIS that suggested additions, deletions, and modifications to the proposed route system for the Preferred Alternative. The Approved RMP identifies that specific designated routes may be modified through subsequent implementation planning and project planning on a case-by-case basis and based on site specific analysis in conformance with the National Environmental Policy Act. However, the route designation process entailed the analysis of thousands of route segments covering over 1.8 million acres. Due to the magnitude of this effort, it is not reasonable to begin immediately making modifications to the route system. Modifications to the route system in the Approved RMP will not be considered until implementation of the travel portion of the plan has been substantially completed which includes mapping, signing, monitoring, and evaluation. The process for considering route modifications will be detailed in the Implementation Plan being developed for the RMP.

E. NOTICE OF MODIFICATIONS AND CLARIFICATIONS

Modifications and clarifications were made to the Approved RMP based on the review and resolution of the protest letters, as well as from internal review by the BLM. The modifications or clarifications to the decisions are provided below.

Modifications

As a result of protests on the Proposed Plan and continued internal review, the BLM made three modifications to the Proposed Plan. As described below, these modifications are not considered significant changes. The Management Decisions section of the attached Approved RMP includes these modifications:

1. **Greater sage-grouse:** The timing limitation stipulation applied within 2 miles of active leks has been changed from March 1 to May 15 (Proposed Plan) to March 15 to July 15 (Approved RMP.) The oil and gas leasing stipulation has been changed in the Approved RMP and in Appendix A to reflect this modification. This change makes the Moab planning decision consistent with UDWR state policy, BLM conservation strategies and plans, and Greater sage-grouse land use plan decisions statewide (see Management Decision SSS-23).

2. **Gunnison sage-grouse:** In the Approved RMP, all surface disturbing activities will be prohibited within 0.6 mile of Gunnison sage-grouse leks on a year-round basis. This is a change from the Proposed Plan which specified a year-round prohibition of surface disturbing activities within 0.5 miles of a lek and a timing limitation stipulation within 2 miles of a lek. In the Approved RMP, the 0.5 mile restriction has been changed to 0.6 miles and the 2 mile restriction surrounding a lek has been removed. The oil and gas leasing stipulation has been changed in the Approved RMP and in Appendix A to reflect this modification. These changes make the Moab planning decisions consistent with BLM conservation strategies and plans and Gunnison sage-grouse land use plan decisions with the Monticello field office (see Management Decision SSS-24).
3. **Livestock Grazing:** Livestock grazing will be allowed on a limited basis in the Ten Mile Canyon ACEC downstream from Dripping Springs, with grazing changes subject to future monitoring and conformance with Rangeland Health Standards. This change allows the permittee (who filed a protest on the plan decision) to continue his operations on a limited basis. In addition, the BLM has determined that allowing limited grazing in Ten Mile Canyon will not result in detrimental impacts to the relevant and important values identified in the ACEC. This change also rectifies the discrepancy between the grazing decision in the “Livestock Grazing” section where Ten Mile Canyon is not listed as unavailable to livestock grazing and the decision for the “Ten Mile Canyon ACEC” where livestock grazing is excluded from Ten Mile Canyon (see Management Decision ACEC-7).

Clarifications

The following clarifications and minor corrections made to the information included in the Proposed RMP/Final EIS are reflected in the attached Approved RMP.

1. The motorcycle route map in the Proposed Plan (Map 2-11-E-C) showed Tusher-Bartlett Wash as available for motorcycle use. The motorcycle map in the Approved RMP (Map 3) has been clarified to show that this route is no longer available for any type of motorized or mechanized use, including motorcycles.
2. The motorcycle route map in the Proposed Plan (Map 2-11-E-C) showed routes that were available to full sized vehicles as well as to motorcycles. The motorcycle map in the Approved RMP (Map 3) has been clarified to show which of the routes are only available for motorcycles and ATVs (mapping clarification).
3. The Proposed Plan did not explain the process for providing for parking for dispersed camping. The Approved RMP has been clarified by specifying that parking for dispersed camping will be considered as part of implementation of the Travel Plan (see Management Decision TRV-6).
4. The Proposed Plan stated that “Should any Wilderness Study Area (WSA), in part or in whole, be released from wilderness consideration, proposals in the released area would be examined on a case by case basis. All proposals inconsistent with Interim Management Policy (IMP) would be deferred until completion of requisite plan amendments.” This language is changed in the Approved RMP to state that “All proposals inconsistent with the goals and objectives of the Approved RMP will be deferred until completion of requisite plan

amendments.” This change was necessary because if an area is released as a WSA, IMP no longer applies (see Management Decision WSA-3).

F. MANAGEMENT CONSIDERATIONS IN SELECTING THE APPROVED RMP

The BLM is tasked to provide multiple use management for public lands by the Federal Land Policy and Management Act and numerous other laws and regulations that govern the management of public lands. Due to the diversity of community needs and stakeholders affected by management of BLM lands, there has been both support and opposition to certain components of the Proposed Plan. BLM’s objective in choosing Alternative C as the Preferred Alternative, and later using it as the base for the Proposed Plan (with minor modifications selected from the range of alternatives) was to address these diverse needs and concerns in a balanced manner and provide a practical and workable framework for management of public lands. The BLM is ultimately responsible for preparing a plan consistent with its legal mandates, which reflects its collective professional judgment, incorporating the best from competing viewpoints and ideas. The Approved RMP (the Proposed Plan as clarified and modified in consideration of public comments and internal review) provides a balance between those reasonable measures necessary to protect the existing resource values and the continued public need for use of the public lands within the planning area. Both local and national interests were taken into account in arriving at this balance. The practical application of decisions was considered in light of land ownership patterns and the degree of Federal control over the resources in a given area.

Approval of a plan that provides a balance to meet both resource concerns and social and economic concerns in the planning area was a major factor in its selection. The Proposed Plan was selected because it proposed management that will improve and sustain properly functioning resource conditions while considering needs and demands for existing or potential resource commodities and values. In the end, resource use is managed by integrating ecological, economic, and social principles in a manner that safeguards the long term sustainability, diversity, and productivity of the land.

All Surface Disturbing Activities

Stipulations for oil and gas leasing and other surface disturbing activities are referred to throughout the Approved RMP and provide protection to resource values and land uses by establishing authority for delay, site changes, or the denial of operations. The stipulations apply, where appropriate and practical, to all surface-disturbing activities associated with land-use authorizations, permits, and leases issued on BLM lands. As a result, protections for resource values are applied in a consistent manner to all activities. The stipulations are subject to exceptions, modifications, and waivers that are a means of adapting the stipulations to meet changing circumstances. The stipulations in the Approved RMP, along with the exceptions, modifications, and waivers, are provided in Appendix A.

Air Quality

The BLM does not have regulatory control over air quality issues, either on public lands or on Tribal or state lands. The BLM relies on the agency with jurisdiction over air quality to set regulatory standards and criteria to protect the air quality in a particular area. Once these standards are established, the BLM references them in its permitting documents and ensures that all permitted activities on public lands refer to the appropriate agency's standard. With this regulatory framework in place the Approved RMP, by necessity, does not make any air quality decisions. Where the State of Utah standards are inapplicable (e.g. over Tribal lands), the BLM will work with the Environmental Protection Agency (EPA) to ensure that the appropriate federal standards are included or referenced in permitting documents. Finally, the Approved RMP established goals and objectives for air quality.

The Approved RMP allows the Moab FO to ensure that authorizations granted to use public lands and the BLM's own management programs comply with and support applicable local, state, and federal laws, regulations, and implementation plans pertaining to air quality.

Cultural Resources

The BLM has completed the formal Section 106 consultation with the Utah State Historic Preservation Office (SHPO). The July 17, 2008, letter from the SHPO concurred with the BLM's recommendation of No Adverse Effect from the decisions in the PRMP/FEIS (see Appendix C). The Approved RMP will reduce imminent threats to significant cultural resources from natural and human-caused deterioration and reduce potential conflicts with other resources.

Native American organizations were invited to participate at all levels of the planning process for the Moab RMP. As part of the RMP/EIS scoping process, by letter dated August 1, 2003, the Utah State Director initiated consultation for land-use planning with 34 tribal organizations. In the letter, the BLM requested information regarding any concerns the tribal organizations might have within the planning areas, specifically requested input concerning the identification and protection of culturally significant areas and resources located on lands managed by the Moab Field Office, and offered the opportunity for meetings. Between November 2003 and May 2004, all 34 tribal organizations were contacted to determine the need for additional or future consultation for the study areas identified in the consultation letter. Meetings were arranged when requested.

In consulting with tribes or tribal entities, the BLM emphasized the importance of identifying historic properties having cultural significance to tribes (commonly referred to as Traditional Cultural Properties (TCPs)). The BLM held meetings with 12 tribal organizations between December 2003 and May 2004. The BLM was represented at most of these meetings by the Field Office manager and archaeologist. During these meetings, tribal organizations were invited to be a cooperating agency in the development of the land-use plan; however, none of the tribal organizations requested to be a cooperating agency.

Several tribal organizations requested that an additional meeting be held after the DRMP/EIS alternatives were prepared. The Moab FO mailed a draft copy of the range of alternatives to 12

tribal organizations in December 2005. In 2006 and 2007, the Moab FO manager and archaeologist participated in a second round of meetings with the five tribes who so requested. At these meetings, the draft RMP/EIS alternatives were discussed with special emphasis on cultural resource issues. A copy of the Moab Draft RMP/EIS was mailed in August 2007 to 12 tribal organizations. In April 2008, the BLM extended an invitation to meet with tribal organizations regarding the PRMP/FEIS. Two tribes accepted this invitation.

Lands and Realty

The Approved RMP allows a 2,640 foot wide utility corridor which provides ample opportunities and flexibility for the upgrading, addition, and expansion of utility needs. The Approved RMP provides a viable energy corridor for oil, gas, and hydrogen pipelines as well as electricity transmission and distribution facilities as specified by the West-Wide Energy Corridor Programmatic EIS and the Energy Policy Act of 2005. At the same time, the decision still affords protection for natural resources by limiting surface disturbance to within the 2,640 foot corridor width.

The Approved RMP designates 370,250 acres as exclusion areas (of which about 350,000 acres are within WSAs, and thus is a non-discretionary decision) and 217,480 acres as avoidance areas for rights-of-way. These exclusion and avoidance areas are in lands with sensitive natural resources such as wilderness values, municipal watersheds, relict vegetation, high quality scenery, and crucial desert bighorn sheep habitat. These areas include Fisher Towers, Mill Creek, Beaver Creek, Mary Jane Canyon, Castle Valley, Shafer Basin, Long Canyon, and lands along the Green, Colorado, and Dolores Rivers. The designation of exclusion and avoidance areas in the Approved RMP provides a balance between granting rights-of-way and protecting important natural resources.

According to Section 102 (a) of FLPMA, all public lands will be retained in Federal ownership unless it is determined that disposal of a particular parcel will serve the national interest. Furthermore, Section 203 (a) of FLPMA provides for sale of public lands if one of the following criteria is met: (1) the tract is difficult and uneconomic to manage as part of the public lands and is not suitable for management by another Federal agency; (2) such tract was acquired for a specific purpose and the tract is no longer required for that or any other Federal purpose; or (3) disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development that cannot be achieved prudently or feasibly on land other than public land. The public lands in the Moab Field Office that have been identified for consideration for disposal by sale in the Approved RMP meet one or more of these criteria.

A prerequisite for entering into the exchange of Federal for non-Federal lands is the BLM determination that such an exchange is in the public interest. To make this determination, general criteria have been developed in the Approved RMP for both disposal of Federal lands and acquisition of non-Federal lands. Every exchange proposal during the life of the Approved RMP will meet the criteria for disposal and acquisition. The value(s) of acquisition must outweigh the value(s) of disposal for the proposal to be in the public interest and an exchange to be considered.

Livestock Grazing

The Approved RMP responds to issues related to managing for healthy rangelands and riparian and upland vegetation while still providing for livestock grazing and fish and wildlife habitat by making most of the planning area available for livestock grazing, as long as Standards for Rangeland Health continue to be met. This resulted in a limited set of decisions that were considered in the land use planning process.

According to BLM policy, decisions about season of use, stocking densities, forage allocation, and utilization are made using Standards for Rangeland Health and Guidelines for Grazing Management during the grazing permit renewal process. These are implementation-level decisions based on monitoring and inventory of range conditions and evaluation of such data. Changes in specific livestock management practices are, therefore, minimal in the Approved RMP.

The decisions made in the Approved RMP are limited to whether an allotment is available or not available for grazing during the life of the plan. The Approved RMP makes 1,690,481 acres (93 percent) available for grazing and 132,047 acres (7 percent) not available for grazing. The Approved RMP includes making livestock grazing unavailable in the Cottonwood, Diamond, Bogart, and Pear Park allotments based on prior written agreements with the Utah Division of Wildlife Resources (UDWR). Other allotments such as Between the Creeks, North Sand Flats, South Sand Flats, Ida Gulch, and Mill Creek are unavailable to livestock grazing because of conflicts with recreation use, municipal watersheds, threatened and endangered plants, riparian, wildlife, and cultural resources.

The Approved RMP also specifies building a fence along the south side of Highway 128, removing the conflict with vehicles and cattle. The Approved RMP addresses the safety issue while still allowing the majority of the Professor Valley allotment to be grazed. The Approved RMP eliminates the grazing of domestic sheep in desert bighorn sheep habitat as specified by BLM policy.

The Approved RMP provides the best balance in allowing grazing to occur while protecting important natural and cultural resources.

Minerals

The Approved RMP specifies restrictions for permitted activities to resolve concerns regarding the impacts of these uses. These conditions apply not only to oil and gas leasing, but also apply, where appropriate, to all other surface disturbing activities associated with land-use authorizations, permits, and leases, including other mineral resources. For example, rights-of-way exclusion and avoidance areas are consistent with areas closed to oil and gas leasing and with a no surface occupancy stipulation, respectively.

The Approved RMP manages oil and gas leasing and other surface disturbing activities with the following stipulations: Closed - 370,250 acres; No Surface Occupancy – 217,480 acres; Timing Limitations/Controlled Surface Use Stipulations - 806,994 acres. The Moab planning area is

entirely within two sedimentary basins (Paradox and Uinta Basins) recognized nationally for oil and gas resources. As specified in the Energy Policy Conservation Act and BLM policy, the oil and gas leasing stipulations in the Approved RMP are the least restrictive necessary to protect sensitive resource values while allowing for development.

Of the 370,250 acres that are closed to oil and gas leasing, only 25,306 acres are outside Wilderness or Wilderness Study Areas and therefore constitute a planning decision. Wilderness and Wilderness Study Areas are closed to oil and gas leasing by law and constitute a non-discretionary decision. The 25,306 acres are closed to oil and gas leasing by a discretionary decision because it is not reasonable to apply a no surface occupancy (NSO) stipulation. These discretionarily closed areas involve blocks of land so large that oil and gas resources are physically inaccessible by current directional drilling technology from outside the boundaries of the NSO areas.

Sensitive resources protected by the application of a no surface occupancy stipulation in the Approved RMP include the major river corridors of the Colorado Plateau (Green, Colorado, and Dolores Rivers), high use recreation areas such as the Slickrock Trail, popular campgrounds such as Horsethief and Ken's Lake, municipal watersheds (Castle Valley and Mill Creek/Spanish Valley), non-WSA lands managed to protect, preserve and maintain their wilderness characteristics (Beaver Creek, Fisher Towers, and Mary Jane Canyon), Areas of Critical Environmental Concern (Behind the Rocks, Mill Creek, Ten Mile, Highway 279/Shafer Basin/Long Canyon, and a portion of Cottonwood/Diamond Watershed), and crucial desert bighorn habitats, including migration corridors. These NSO areas (217,480 acres) include many of the landscapes for which Moab is nationally and internationally renowned. They are the landscape jewels of the Moab planning area. A NSO stipulation is indeed the least restrictive approach necessary to protect the important resources within these iconic areas from surface disturbing activities.

Those resources that can be protected by timing limitations or controlled surface use stipulations in the Approved RMP include wildlife habitat, sensitive soils, and visual resources. Timing limitation and controlled surface use stipulations are also applied in the Approved RMP to protect special status species. The stipulations for special status species were developed in cooperation with the U.S. Fish and Wildlife Service and are non-discretionary based on law and policy.

The timing limitation stipulations in the Approved RMP are applied to crucial big game wildlife habitats identified by the BLM and the Utah Division of Wildlife Resources. The areas with timing limitations are open to oil and gas leasing and other surface disturbing activities but would be closed during identified timeframes that are important to the health of the species such as during winter and birthing periods, unless a waiver, exception, or modification to the stipulation applies.

Timing limitation stipulations have also been applied in the Approved RMP to protect sensitive soils from surface disturbing activities during times when these soils are susceptible to erosion. Surface disturbing activities in sensitive soils during wet periods can cause deep rutting and runoff problems which lead to increased erosion. Surface disturbing activities in sensitive soils

during the windy, dry spring months can result in windblown dust that has caused blackouts along Interstate 70, an obvious safety problem. In addition, a controlled surface use stipulation is applied in the Approved RMP to protect fragile soils on steep slopes from erosion. This stipulation prohibits construction on slopes greater than 30% unless an engineering plan can demonstrate that erosion on these slopes would be prevented.

A controlled surface use stipulation in the Approved RMP is applied to areas managed with VRM Class II objectives. This stipulation protects high quality visual resources, including scenic driving corridors such as Utah Scenic Byways 128, 313, and 279, the rims of Canyon Rims SRMA, Wilson Arch, the Kane Creek Corridor, and the Gemini Bridges area. A controlled surface use stipulation is also applied to the lands surrounding Arches National Park to protect viewsheds from key observation points within the Park. The controlled surface use stipulation for VRM II areas requires that the level of change to the landscape be low. Activities can be seen, but should not attract the attention of the casual observer.

The timing limitation and controlled surface use stipulations in the Approved RMP allow for oil and gas development and other surface disturbing activities while providing protection for wildlife habitats, sensitive soils, and high quality visual resources. These stipulations are the least restrictive necessary for the protection of these resources.

The Approved RMP provides opportunity for a substantial amount of mineral revenue based on estimated oil and gas production while protecting the most important resources within the planning area. Additionally, the stipulations imposed in the Approved RMP would not unreasonably interfere with the potential development of mineral resources. High development potential areas for mineral resources are generally not located in areas with sensitive resources which are managed as NSO or closed. Therefore, the Approved RMP provides a balance between protection of resources and commodity use and development.

Non-WSA Lands with Wilderness Characteristics

Impacts on uses as a result of discretionary focused management, such as the protection, preservation and maintenance of non-WSA lands with wilderness characteristics, were disclosed in the Proposed RMP/Final EIS, and considered in conjunction with impacts to resource values. There are 47,761 acres within 3 areas (Beaver Creek, Fisher Towers, and Mary Jane Canyon) that are carried forward in the Approved RMP for protection of their wilderness characteristics. They are managed primarily with a no surface occupancy stipulation for oil and gas leasing and all other surface disturbing activities, and as an avoidance area for rights-of-way.

Beaver Creek, Fisher Towers, and Mary Jane Canyon are the largest stand-alone blocks of undeveloped land of all the areas inventoried for wilderness characteristics in the planning area. Mary Jane Canyon and Fisher Towers are contiguous (separated only by the road) and thus create an even larger expanse. The size of all three areas makes them more suitable for effectively protecting, preserving, and maintaining their wilderness characteristics. In addition, managing these areas for wilderness characteristics is compatible with other management actions in the Approved RMP. Beaver Creek is entirely within the Dolores River Canyons SRMA, an *undeveloped* SRMA, which is managed for primitive recreation opportunities. Fisher Towers

and Mary Jane Canyon are within the Richardson Amphitheater/Castle Rock Hiking, Climbing and Equestrian Focus Area (part of the Colorado Riverway SRMA) which is managed to enhance non-motorized opportunities. Thus, all three areas are managed for primitive recreation opportunities which coincide with managing these areas for wilderness characteristics. The management of the Beaver Creek area for wilderness characteristics is in conformance with the Grand County Master Plan.

Beaver Creek, Fisher Towers, and Mary Jane Canyon have only moderate development potential for oil and gas. There are no existing oil and gas leases or other known valid existing rights, such as mining claims, within these three areas. Furthermore, these three areas do not conflict with the development potential for any of the other mineral resources identified within the planning area.

There were 218,724 acres found during the inventory reviews to have wilderness characteristics which were not selected for management of those characteristics in the Approved RMP. The reasons for this decision were varied and complex. Many of the inventoried areas were small, dissected, had irregular land ownership patterns, or qualified only because they were attached to another management unit.

Out of these 218,724 acres, about 138,483 acres were found to have other important resources or resource uses that would conflict with protection, preservation, or maintenance of the wilderness characteristics. Many of the areas have high oil and gas development potential and over one-third of this acreage is already leased. In other areas, ongoing and future range improvements and vegetative treatments conflict with the protection of wilderness values.

Of the remaining 80,241 acres, wilderness characteristics are protected by a no surface occupancy stipulation applied to manage for an array of other resource values. For example, some of this acreage (Shafer, Gooseneck, Behind the Rocks, and Mill Creek Canyon) is managed as Areas of Critical Environmental Concern. An ACEC designation is considered the most appropriate mechanism for management because it recognizes and gives priority to the relevant and important values identified in these areas. Other acreage (out of the 80,241 acres) is managed to recognize the riverine and scenic values as well as the recreational uses along the major river corridors. In addition, the important water resources associated with municipal watersheds are recognized and given priority for management.

The Approved RMP provides the best balance in allowing for uses to occur while providing for protection of non-WSA lands with wilderness characteristics.

In future references, lands managed in the Approved RMP as non-WSA lands with wilderness characteristics will be referred to as BLM natural areas. This change does not represent a new designation or a new decision. Rather, BLM wants to recognize these discretionary decisions with a better, simpler reference. Wilderness Areas and Wilderness Study Areas are formal designations that are managed in a prescribed manner. To avoid confusing these official designations with discretionary agency decisions, BLM has chosen a new reference to distinguish between formal designations (e.g., Wilderness Areas) and a discretionary management category (BLM natural areas). According to the Approved RMP, BLM natural

areas will be managed to protect, preserve, and maintain values of primitive recreation, the appearance of naturalness and solitude.

Recreation

The Approved RMP responds to recreation issues by providing Special Recreation Management Areas and Recreation Management Zones (Focus Areas) to manage for a variety of recreational experiences for approximately 2 million yearly visitors to the Moab planning area. These visitors come from all over the nation, as well as the world, to specifically enjoy the attractions in the planning area. These visitors engage in an array of non-motorized and motorized recreation activities, many of which conflict with each other. Recreational activities include camping, scenic driving, enjoying natural and cultural features, hiking, backpacking, canyoneering, mountain biking, horseback riding, hunting, rock climbing, BASEjumping, boating (rafting, canoeing, and kayaking), four-wheel driving, rockcrawling, ATVing, and dirt biking, among others.

The Moab economy is heavily dependent upon recreation-based businesses. In 2006, travelers spent about \$265 million in Moab, generating \$9 million in tax revenue (67 percent of the total tax revenue). Over 58% of the employment in Moab is directly related to tourism and recreation, with 5,055 jobs in that sector (State of Utah, Governor's Office of Economic Development). Commercial outfitters operating on BLM lands generated \$6,270,676 in revenues in 2006. These outfitters provide services for many activities including rafting, hiking, climbing, four wheel driving, ATVing, photography tours, horseback riding, ballooning, hunting, canyoneering, and mountain biking. Maintaining a wide variety of recreational opportunities is important to the Moab economy and the businesses that are dependent upon them.

The ten Special Recreation Management Areas (SRMA) designated in the Approved RMP are in areas where high recreation use is currently occurring. Each SRMA allows for a set of distinct recreation uses as well as a specific recreation management strategy. In addition, each SRMA provides management direction for recreation uses as well as protection of the cultural and natural resources found in the SRMA. For example, the Colorado Riverway SRMA manages the half million visitors to this area by designating campgrounds, hiking trails and routes, and by applying recreation rules such as limiting campfires. The Two Rivers SRMA manages the popular Westwater Canyon float trip by imposing launch limits. The Utah Rims SRMA is established near the Utah-Colorado border to manage the motorized activities emanating from the rapidly growing Grand Junction area. The SRMAs designated in the Approved RMP enable the BLM to more actively manage for the intensity, diversity, and compatibility of recreation uses while protecting the resources that visitors come to enjoy.

The 30 Focus Areas (Recreation Management Zones or RMZs) designated in the Approved RMP are necessary to successfully manage the diversity of recreational activities that occur in the Moab planning area. Focus Areas are established to emphasize a specific recreation use and provide a specific set of recreation opportunities and facilities. For example, the Klondike Bluffs Mountain Bike Focus Area is designated in the Approved RMP as an area for new mountain bike trail development and continued mountain bike use. As another example, the Dee Pass Motorized Trail Focus Area is established for motorcycle and ATV use. All competitive

motorized events would be directed to this area. By emphasizing and managing for specific recreation activities in these Focus Areas, recreation conflicts are reduced. Focus Areas set visitor expectations for a specific type of recreation experience, thereby reducing potential conflict. Those who choose to hike in a motorized Focus Area should not be surprised by the amount of motorized activity. Focus Areas in the Approved RMP provide opportunities for the widest range of recreational activities and attendant business opportunities.

The Approved RMP provides the greatest range of recreational opportunities while still reducing user conflicts, providing recreation business opportunities, and protecting resources.

Soil and Water

See Minerals portion of this section.

Special Designations: Areas of Critical Environmental Concern

Concerns about specific resource values are addressed throughout the Approved RMP, and eliminated the need to designate some areas as Areas of Critical Environmental Concern (ACECs) since other resource decisions in the Approved RMP provide adequate protection. In many instances, WSAs overlay many of the potential ACECs and management under the *Interim Management Policy for Lands under Wilderness Review* (IMP) more than adequately protects the relevant and important values. If Congress releases the WSAs from wilderness consideration, the Approved RMP states that all activities inconsistent with the goals and objectives of the Approved RMP would be deferred until a plan amendment is completed. Any plan amendment would have to provide protection to the relevant and important values identified.

Since management decisions contained in the Approved RMP protect many of the relevant and important values in the planning area, only five areas were designated as ACECs in the Approved RMP, where additional special management is necessary. These five areas were designated because ACEC management is the most appropriate for protecting the identified relevant and important values in these five areas.

Table 2 provides a list of the potential ACECs that were not designated in the Approved RMP, their relevance and importance values, and planning decisions carried forward that protect those values.

Table 2. Management Protection Provided to Potential ACECs Not Designated in the Approved RMP

Potential ACEC Not Designated in Approved RMP	Relevant and Important Value(s)	Management Protection Provided in Approved RMP
Bookcliffs Wildlife Area (304,252 acres)	Wildlife Natural systems	In the Approved RMP, 250,078 acres of the Bookcliffs potential ACEC is within five Wilderness Study Areas and are managed under IMP. This acreage is managed as closed to oil and gas leasing and all other surface disturbing activities. This acreage is also closed to travel.

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	Cultural resources	<p>These two actions protect the relevant and important values.</p> <p>In the Approved RMP, the 54,174 acres outside the WSA are managed with a timing limitation stipulation to protect the wildlife values. All motorized travel is on designated routes only. Riparian areas are managed to preclude surface disturbing activities which would protect natural systems. Cultural resources are protected by law, policy, and procedure.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
Canyon Rims (23,400 acres)	Scenery	<p>In the Approved RMP, the Canyon Rims potential ACEC is managed as VRM Class II to protect scenic values. Oil and gas leasing and other surface disturbing activities are managed with a controlled surface use stipulation to protect scenic values. Canyon Rims is managed as a Special Recreation Management Area with special emphasis given to these scenic values. Motorized activity is allowed only on designated routes to protect scenic values.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
Cisco White Tailed Prairie Dog Complex (117,481 acres)	Wildlife	<p>In the Approved RMP, the Cisco White Tailed Prairie Dog Complex potential ACEC would be managed with a controlled surface use stipulation for oil and gas leasing and other surface-disturbing activities within 660 feet of active prairie dog colonies. No permanent above ground facilities would be allowed within the 660 foot buffer. In addition, motorized activity is only allowed on designated routes, protecting wildlife values.</p> <p>Using Standards for Rangeland Health and Guidelines for Grazing Management, the grazing season of use would be managed to allow for adequate vegetative seed production to support prairie dog habitat.</p> <p>Thus, the relevant and important value would continue to be protected.</p>
Colorado River Corridor (50,483 acres)	Scenery Cultural Resources	<p>In the Approved RMP, the Colorado River Corridor potential ACEC is managed as the Colorado Riverway SRMA. Recreation activities are restricted (including limiting camping to campgrounds) in order to avoid unacceptable impacts to the relevant and important values.</p>

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	Wildlife Fish Rare Plants	<p>Motorized activity is restricted to designated routes, also protecting these values. The Colorado River Corridor is managed as VRM Classes I and II to protect the unique scenic values of the area.</p> <p>In the Approved RMP, the area is managed as either closed or with a no surface occupancy stipulation for oil and gas leasing and all other surface disturbing activities. This prohibition of surface disturbing activities protects scenery, cultural resources, rare plants, wildlife, and fish. In addition, the Endangered Species Act will protect the endangered fish.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
Labyrinth Canyon (8,528 acres)	Scenery Fish	<p>In the Approved RMP, Labyrinth Canyon potential ACEC is managed as the Labyrinth Canyon Focus Area within the Labyrinth Rims/Gemini Bridges SRMA to control recreation impacts to relevant and important values. Labyrinth Canyon is managed with a no surface occupancy stipulation for oil and gas leasing and all other surface disturbing activities, protecting scenic values. The area is managed as VRM Class II and motorized activity will be allowed only on designated routes.</p> <p>The Endangered Species Act will protect the endangered fish.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
Upper Courthouse (11,529 acres)	Historic, paleontological and cultural resources Natural systems Rare plants	<p>In the Approved RMP, Upper Courthouse potential ACEC will be managed within the Labyrinth Rims/Gemini Bridges SRMA and as the Mill Canyon/Upper Courthouse Mountain Biking Focus Area. Restrictions on recreation protect the relevant and important values. Motorized and mechanized travel is allowed on designated routes only, protecting these values. Mesa top relict plant communities are managed with a no surface occupancy stipulation for oil and gas leasing and other surface disturbing activities which protect rare plants.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
Westwater Canyon (5,069 acres)	Scenery Fish	<p>In the Approved RMP, Westwater Canyon potential ACEC is within a WSA and is managed under IMP. The area is managed as VRM Class I to protect scenic values.</p>

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		<p>The area is closed to oil and gas leasing and all other surface disturbing activities, and is closed to motorized travel. These decisions protect the relevant and important values.</p> <p>In addition, Westwater Canyon will be managed as part of the Two Rivers SRMA which will minimize recreation impacts on the scenic values.</p> <p>The Endangered Species Act will protect the endangered fish.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
White Wash (2,988 acres)	Natural systems	<p>In the Approved RMP, White Wash potential ACEC is managed as part of the Labyrinth Rims/Gemini Bridges SRMA. About 1,866 acres are managed as open to cross country travel with management prescriptions in place to protect the relevant and important values of the dunefield cottonwood trees and water sources. These resources would be fenced and closed to motorized travel. Camping would be limited to designated sites in the White Wash area.</p> <p>In the 1,122 acres outside the dunes, vehicles are limited to designated roads. These actions protect the relevant and important values.</p> <p>Thus, the relevant and important values would continue to be protected.</p>
Wilson Arch (3,700 acres)	Scenery	<p>In the Approved RMP, Wilson Arch potential ACEC is managed as VRM Class II to protect its scenic values. Motorized activity is allowed on designated routes only, also protecting scenic values. The area is managed with a controlled surface use stipulation on oil and gas leasing and other surface disturbing activities to protect scenic values.</p> <p>Thus, the relevant and important values would continue to be protected.</p>

In addition, the Mill Creek Canyon ACEC and the Behind the Rocks ACEC designated in the Approved RMP do not include the acreage within the Mill Creek Canyon WSA and the Behind the Rocks WSA, respectively. The acreage within these two WSAs is managed under the *Interim Policy for Lands under Wilderness Review*, protecting the relevant and important values found in that part of the Potential ACECs.

Five ACECs are designated in the Approved Plan: Behind the Rocks (5,201 acres), Cottonwood-Diamond Watershed (34,027 acres), Highway 279/Shafer Basin/Long Canyon (13,500 acres), Mill Creek Canyon (3,721 acres) and Ten Mile Wash (4,980 acres). These five ACECs designated in the Approved Plan are in areas where special management was required to protect the relevant and important values of the potential ACEC. Management actions are outlined in the Approved RMP to protect these values. For example, management actions are tailored for the Ten Mile Wash ACEC to protect the relevant and important values of natural systems, wildlife, cultural resources, and natural hazards. Management actions include a no surface occupancy stipulation for oil and gas leasing and other surface disturbing activities, restricting grazing, no competitive events, no woodcutting, restrictions on camping and the establishment of a speed limit. These special management actions are necessary to protect the relevant and important values. The establishment of Ten Mile as an ACEC gives priority to the management of the resource values identified in this area.

Special Designations: Wild and Scenic Rivers

There are 11 eligible river segments that are carried forward as suitable for inclusion into the National Wild and Scenic River system in the Approved RMP to protect the free-flowing nature and outstandingly remarkable values associated with the river segments. These 11 segments are located along the Green, Colorado, and Dolores Rivers and include well-known sections such as Westwater Canyon, the Colorado “Daily”, Labyrinth Canyon, and Desolation Canyon.

All river segments found suitable in the Approved RMP are those in which recreation is a key outstandingly remarkable value (ORV), particularly dependent on the free-flowing nature of these river segments. The unique nature of this recreation ORV centers around regionally, nationally, and internationally significant private and commercial river running opportunities. These river running opportunities constitute premier whitewater and flatwater trips which are highly sought after. For example, the BLM receives over 3,000 applications per year for the 450 available trip permits on the Desolation Canyon segment of the Green River. River running activities are an important component of the local economies in the planning area. River running companies are highly capitalized and valuable businesses that depend on these suitable river segments. In addition, private river runners add substantial revenue to the local economy. The imposition of dams along these segments would eliminate these important river running opportunities and the commercial enterprises which depend upon them.

BLM made tentative river segment classifications in 2003 as part of the Wild and Scenic River eligibility study conducted as part of the Moab planning process. River segments were tentatively classified as “wild,” “scenic” or “recreational.” Alternatives in the Draft and Proposed RMP provided a range of potential classifications for analysis purposes. The proposed plan chose to change the original classification to meet resource objectives. This was carried forward into the Approved Plan.

In the Approved Plan, segments of the Colorado and Green Rivers that are in WSAs are classified as “wild”, while all other segments are classified as either “scenic” or “recreational.” BLM Manual 8351.33C states that “Alternatives may be formulated for any combination of

designations and classifications. Reasons for considering alternative tentative classifications include resolving conflicts with other management objectives, continuity of management prescriptions, or other management considerations.” In some cases, the tentative classification of a river segment was changed in the Approved RMP in order to accommodate other management considerations and to provide more management flexibility as necessary.

Colorado River segment 3 (from Cisco to the Dolores River confluence) was resegmented and the downstream portion of that segment (3b) was inventoried with a tentative classification of “scenic” and is designated as “recreational” in the Approved RMP. This segment contains large amounts of private lands. The development of these lands could require rights of way from the BLM for roads, power, and other infrastructure. A “recreational” classification would provide more flexibility to consider granting these rights-of-way. Colorado River segment 6 (from state land to the Canyonlands National Park boundary) was inventoried with a tentative classification of “wild” and designated as “scenic” in the Approved RMP because the heavily travelled road paralleling the river may require maintenance and to allow for the continuation of the heavy filming activity which occurs in the area.

Dolores River segment 1 (from the state line to Fisher Creek) was inventoried with a tentative classification of “scenic” and is designated as “recreational” in the Approved RMP to accommodate the recreational facilities (including a boat ramp) along the river as specified in the decisions for the Dolores River Canyons SRMA. In addition, the agricultural lease lands in this area will require extensive vegetative treatments to remove knapweed and to restore these lands to health. A “recreational” classification allows for a full range of agricultural and livestock uses, including land treatments.

Dolores River segment 2 (from Fisher Creek to Bridge Canyon) was inventoried with a tentative classification of “wild” and is designated as “scenic” in the Approved RMP to accommodate the University of Utah Entrada Field Station and Education Center located along the Dolores River. The Field Station is entirely surrounded by public lands. The University plans extensive research projects and courses utilizing these adjacent public lands. Research projects include vegetative treatments, range studies, wildlife studies, hydrology, geology, mechanical engineering, water use policies, and other long term research projects. The “wild” classification would not allow the flexibility for these intended uses.

Dolores River segment 3 (from Bridge Canyon to the confluence) was inventoried with a tentative classification of “scenic” and is designated as “recreational” in the Approved RMP. This “recreational” classification allows for a full range of agricultural and livestock uses, including the extensive control of exotic plants at Roberts Bottom.

Green River segment 4(a) (from Mile 97 to Canyonlands National Park boundary) is classified as “scenic” in the Approved RMP. Segment 4(a) includes the portion of segment 4 from Mile 97 to Mile 91, and all of segment 5 (Ruby Ranch at Mile 91 to Hey Joe) and segment 6 (Hey Joe to Canyonlands National Park). Segment 5 was inventoried with a tentative classification of “wild” and is designated as “scenic” (as part of segment 4(a)) in the Approved RMP. This portion contains a section of SITLA land as well as some private land. Management of this segment as

“wild” could preclude access and water developments on SITLA and private lands. In addition, the “wild” classification would remove opportunities for motorized travel.

Eligible river segments that were not carried forward as suitable in the Approved RMP are protected by various other management decisions. Many of these river segments include scenery and non-motorized recreation as Outstandingly Remarkable Values (ORVs). Scenery and non-motorized recreational activities, especially non-boating activities, are more amenable for management by other means such as WSAs, non-WSA lands with wilderness characteristics, and SRMAs. For example, Cottonwood Canyon, Mill Creek, Negro Bill Canyon, and Rattlesnake Canyon are within WSAs and are closed to surface disturbing activities. Thompson Canyon, Beaver Creek, Onion Creek, and Professor Creek are within non-WSA lands managed to preserve, protect, and maintain their wilderness characteristics in the Approved RMP and are managed with a no surface occupancy stipulation for oil and gas leasing and other surface disturbing activities. The ORVs along these eligible segments are protected by other management actions in the Approved RMP.

In addition, BLM looks forward to working with the State of Utah, local and tribal governments, and other federal agencies during the next phase of the Wild and Scenic River process. BLM will work cooperatively with the above entities in a statewide study to reach consensus regarding recommendations to Congress for the inclusion of rivers into the NWSR system. BLM will also continue to work with affected local, state, federal, and tribal partners to identify in-stream flows necessary to meet critical resource needs, including values related to the subject segments, so that they may be identified for inclusion into future recommendations to Congress.

Travel Management

The Approved RMP responds to the issue of OHV use by designating all BLM lands as open, closed, or limited. Out of about 1.82 million acres within the planning area, 1,866 acres are open to cross-country travel, 339,298 acres are closed to motorized travel, and 1,481,334 acres are limited to designated routes.

The open area (1,866 acres) in the Approved RMP encompasses the White Wash Sand Dunes which is currently a popular area for cross-country OHV use. The sand dunes were found to be acceptable for cross country OHV use because they lack soil and vegetation development and the shifting sands quickly eliminate the visible impacts of such use. In addition, the Approved RMP specifies that the important resources within the sand dunes consisting of cottonwood trees and water sources (springs) would be protected by closures and fencing. The Approved RMP significantly reduces the acreage currently open to cross-country travel within the planning area. However, the Approved RMP still provides some opportunities for Open OHV use to accommodate that activity.

The closed area (339,298 acres) in the Approved RMP applies to the existing Wilderness Study Areas (WSAs). Almost all of the inventoried routes within the WSAs would be closed to motorized travel. As a result, the opportunities for solitude and primitive recreation would be enhanced and the potential for impairment of wilderness values by motorized activities is eliminated.

The limited area (1,481,334 acres) in the Approved RMP pertains to the majority of the planning area. The Approved RMP responds to travel management and access issues by providing a network of transportation routes within the limited designation that tie into roads administered by the counties, National Park Service, the Forest Service, and the State of Utah. The process for designating routes within the limited designation is detailed in Section D under Implementation Decisions. The limited designation in the Approved RMP replaces the large amount of area currently available for cross country travel within the planning area. As a result, the Approved RMP provides a substantial amount of protection to natural (vegetation, soils, scenery, riparian, and wildlife) and cultural resources by eliminating cross-country travel which can be detrimental to these resources. The Approved RMP allows for motorized access and opportunities within the limited designation while still providing protection for sensitive resources and non-motorized recreation users.

The areas designated in the Approved RMP as open, limited, and closed provide the best balance between OHV opportunities and access and protection of sensitive resources.

Vegetation (including Riparian, Noxious, and Invasive Plants)

The Approved RMP gives priority to riparian vegetation by making some riparian areas unavailable for livestock grazing. In addition, surface disturbing activities are precluded within 100 meters of riparian areas. The Approved RMP provides specifications for Desired Future Conditions for vegetation resources to ensure ecological diversity, stability, and sustainability. Due to the persistent drought conditions in this region over the past several years, criteria for restricting activities during drought conditions are provided in the Approved RMP. The Approved RMP reiterates the BLM's policy to control noxious weed species and to prevent the infestation and spread of invasive species. The Approved RMP emphasizes the reestablishment and restoration of vegetated areas during project activities using native seed mixes wherever possible. The requirements of related Executive Orders, regulation, and policy would be met in the Approved RMP regarding noxious weeds and invasive plants.

Visual Resource Management

The Moab Field Office is home to some of the most iconic scenery on the Colorado Plateau. These settings attract up to 2 million visitors a year who come to Moab to enjoy the scenery. These scenic settings are also the reason that filming companies choose the Moab area for still advertisement, commercials and motion picture filming. Scenic attractions in the Moab planning area include such well-known locations as Fisher Towers, Castle Rock, Wilson Arch, Looking Glass Rock, Determination Towers, Gemini Bridges, Fossil Point, and the entire Colorado River corridor. The Approved RMP provides protection for these and other scenic attractions, thus safeguarding the visitation and tourism industry which is the backbone of the Moab economy.

Wildlife

The Approved RMP responds to issues regarding wildlife by providing restrictions to uses in crucial wildlife habitat areas. BLM uses the State UDWR crucial habitat boundaries to apply these restrictions because UDWR is the entity with jurisdiction and expertise over wildlife in

Utah. The crucial habitat identified in the Approved RMP for deer, elk, bighorn sheep and other big game species is the result of the State's combination of two previous UDWR categories of habitat – “critical” and “high value.” The State uses the term “crucial” habitat as a trigger to initiate a close examination of proposed projects in order to determine the appropriate management response. To protect desert bighorn lambing and rutting grounds and to protect bighorn migration corridors, a no surface occupancy stipulation was imposed on about 101,897 acres. Furthermore, timing limitation stipulations have been placed on about 349,955 acres of deer and/or elk winter habitat, and on about 293,741 acres of pronghorn fawning habitat. BLM and the State recognize that some of the land within the defined area, depending on season and timing, may not support the respective species for various reasons. The BLM will coordinate with the State on issues related to crucial habitat to determine stipulations necessary to address impacts to the subject wildlife species. Following consultation, the BLM may grant an exception, modification, or waiver. BLM and the State will execute a protocol to implement this provision. Additional details about management restrictions to benefit wildlife are found in the “Minerals” portion of this section.

In addition, protective management measures have been developed in coordination with the U.S. Fish and Wildlife Service and the UDWR to protect all the special status species within the planning area, including those that are threatened or endangered.

Informal Section 7 consultation, as directed by the Endangered Species Act, subsequent regulations, and BLM policy, was conducted with the U.S. Fish and Wildlife Service (USFWS) throughout the development of the RMP. The BLM submitted a Biological Assessment (BA) and requested initiation of formal consultation on July 18, 2008. The USFWS responded with a Biological Opinion (BO) on October 16, 2008 completing the formal Section 7 consultation process. The BO concurred with the determinations made in the BA regarding potential effects on listed, threatened, and endangered species located within the Moab planning area. The entire BO is attached to this Record of Decision (ROD) (as a CD-ROM). The BA and the BO contain committed conservation measures that have been incorporated into the ROD and that will be a part of the implementation of the Approved RMP. These are committed measures that will be included as part of the proposed action of any subsequent site specific activities authorized by the RMP. Should any changes be made to any of the conservation measures identified in the BA and BO, Section 7 consultation with USFWS will be re-initiated.

The BLM, in coordination with the USFWS developed the majority of these committed conservation measures as part of a programmatic Section 7 consultation that was completed in 2007. Some modifications and additional measures were developed during the consultation process specific to the Moab RMP. All site specific level actions potentially impacting listed species or their critical habitat will implement these measures. Incorporating these measures will ensure that the BLM is in compliance with the Endangered Species Act and will meet necessary management and recovery goals. If the BLM determines that any deviations, modifications, or waivers of these conservation measures may be necessary, BLM will re-initiate of Section 7 consultation with USFWS. BLM notes that the Biological Opinion (Appendix B and CD-ROM) provides a number of recommended conservation measures that are beyond the scope of this Approved RMP, but may be considered in tiered consultation with this programmatic opinion when project-specific analysis is conducted in the future. These recommended conservation

measures are optional measures, additional to the committed mitigation contained in the Approved RMP, that BLM will consider at the appropriate time and as deemed necessary to manage and recover listed and candidate plant and animal species occurring within the planning area.

The Approved RMP also incorporates resource protection measures and recommended Best Management Practices to maintain, protect, and enhance habitats that will support a diversity of non-listed sensitive fish, wildlife, and plant species. The intent of these measures is to achieve and maintain suitable habitat for desired population levels and distribution within the area covered by the RMP. The BLM will continue to work cooperatively with UDWR (which has jurisdiction over sensitive wildlife species) to maintain and establish crucial habitat management strategies as reflected in the Approved RMP. These species are managed as necessary to protect the species and their habitat from loss in accordance with the Federal Land Policy and Management Act (FLPMA), the BLM management guidelines and policy contained in BLM's Manual 6840.

The Approved RMP provides the least restrictive stipulations necessary to protect wildlife species while still allowing for resource uses.

G. CONSISTENCY AND CONSULTATION REVIEW

Consistency of the Approved RMP with other local, State, Tribal and federal plans and policies (which sometimes conflict amongst themselves) was also considered as a factor in selection of the Approved RMP. The Approved RMP is consistent with plans and policies of the Department of the Interior and Bureau of Land Management, other federal agencies, state government, and local governments to the extent that the guidance and local plans are also consistent with the purposes, policies, and programs of federal law and regulation applicable to public lands. Chapter 5 of the Proposed RMP/Final EIS provides a full discussion of consistency with all involved entities.

Governor's Consistency

The Governor's Office did not identify any inconsistencies concerning state or local plans, policies, and programs following the 60-day Governor's Consistency Review of the Proposed RMP/Final EIS (initiated August 1, 2008, in accordance with planning regulations at 43 CFR Part 1610.3- 2(e), and concluded on September 30, 2008).

NHPA Section 106 Consultation

A letter was received from the Utah SHPO on July 17, 2008, after reviewing BLM's decisions in the Proposed RMP/Final EIS. In the letter, the SHPO concluded that the decisions in the Proposed RMP will have no adverse affects on historic properties. Because there has been no appreciable change between the Proposed RMP and the Approved RMP, no further SHPO consultation is required and all decisions in the Approved RMP will have no adverse affects on historic properties. The letter of concurrence from the SHPO is found in Appendix C.

Native American Consultation

Consultation with Native Americans on the RMP has been ongoing since 2003. A thorough discussion of Native American Consultation is included under "Cultural Resources" in Section F of this ROD.

Section 7 Consultation under the Endangered Species Act

Informal Section 7 consultation, as directed by the Endangered Species Act (ESA), subsequent regulations, and BLM policy, was conducted with the U.S. Fish and Wildlife Service (USFWS) throughout the development of the RMP. Formal consultation with the USFWS was initiated on July 18, 2008. As required by Section 7(a) of the ESA, the Moab Field Office prepared a Biological Assessment (BA) to evaluate the listed species in its planning area. The BA analyzed the potential impacts on the endangered and threatened species which could result from implementing management actions authorized under the proposed land use plan for the Field Office. The Moab Field Office determined that some of the proposed actions "may affect, and are likely to adversely affect" the listed species and "may affect" designated critical habitat. The USFWS prepared a Biological Opinion (BO), in which they concurred with BLM's determination on October 16, 2008. The memorandum is included in Appendix B, and the entire BO is available on a separate CD. The USFWS further determined that implementation of the RMP, including committed mitigation measures, would not jeopardize the existence of any of the listed species.

H. MITIGATION MEASURES

Measures to avoid or minimize environmental harm were built into the Approved RMP where practicable. Many of the standard management provisions will minimize impacts when applied to activities proposed in the planning area. The *Utah Standards and Guidelines for Rangeland Health* (see Appendix D) will be used as the base standards to assess the health of BLM lands in the planning area. Best management practices (BMPs) will be used (when applicable) for a number of uses including livestock grazing, forest activities, mining, oil and gas development, and other surface disturbing activities (see Appendix A). Additional measures to mitigate environmental impacts may also be developed during subsequent NEPA analysis at the activity level planning and project stages. All practicable means to avoid or minimize environmental harm are incorporated into the Approved Plan.

I. PLAN MONITORING AND EVALUATION

Monitoring is the repeated measurement of activities and conditions over time. Evaluation is a process in which the plan and monitoring data are reviewed to see if management goals and objectives are being met and if management direction is sound. Monitoring data gathered over time is examined and used to draw conclusions on whether management actions are meeting stated objectives, and if not, why. Conclusions are then used to make recommendations on whether to continue current management or change management practices to meet objectives.

The two types of monitoring that are tied to the planning process include implementation and effectiveness monitoring. Land use plan monitoring is the process of (1) tracking the

implementation of land use planning decisions and (2) collecting and assessing data/information necessary to evaluate the effectiveness of land use planning decisions. The two types of monitoring are described below.

Implementation Monitoring: Implementation monitoring is the most basic type of monitoring and simply determines whether planned activities have been implemented in the manner prescribed by the plan. Some agencies call this compliance monitoring. This monitoring documents BLM's progress toward full implementation of the land use plan decision. There are no specific thresholds or indicators required for this type of monitoring.

Effectiveness Monitoring: Effectiveness monitoring is aimed at determining if the implementation of activities has achieved the desired goals and objectives. Effectiveness monitoring asks the question: Was the specified activity successful in achieving the objective? This requires knowledge of the objectives established in the RMP as well as indicators that can be measured. Indicators are established by technical specialists to address specific questions, and thus avoid collection of unnecessary data. Success is measured against the benchmark of achieving desired future conditions established by the plan.

Regulations at 43 CFR 1610.4-9 require that the proposed plan establish intervals and standards, as appropriate, for monitoring and evaluation of the plan, based on the sensitivity of the resources involved. Progress in meeting the plan objectives and adherence to the management framework established by the plan is reviewed periodically. CEQ regulations implementing NEPA state that agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR 1505.2(c)). To meet these requirements, the BLM will review the plan on a regular schedule in order to provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

Land use plan evaluations will be used by BLM to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid. Evaluation of the RMP will generally be conducted every five years per BLM policy, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation earlier than the five year interval. Land use plan evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there is new data of significance to the plan, and if decisions should be changed through amendment or revision. Evaluations will follow the protocols established by the BLM Land Use Planning Handbook H-1601-1 in effect at the time the evaluation is initiated. Specific monitoring and evaluation needs are identified by resource/uses throughout the Approved RMP.

See MFO monitoring plan in Appendix E.

J. PUBLIC INVOLVEMENT

One of BLM's primary objectives during development of the Moab RMP was to understand the views of various publics by providing opportunities for meaningful participation in the resource

management planning process. To achieve this, the BLM published a Notice of Intent to Plan in the *Federal Register* on June 4, 2003. The formal scoping period began on that date, and ended on January 31, 2004. News releases, website information, a mailing list, and planning bulletins informed the public of the scoping period. Six public scoping meetings and two socio-economic workshops were held during this period. In addition, a mobile “Comment Cruiser” elicited scoping comments from the public at various locations. A Final Scoping Summary was issued summarizing the comments obtained through the scoping process. The scoping comments raised issues that were taken into consideration in preparation of the alternatives developed for the Draft RMP/EIS.

On August 24, 2007, the BLM and the Environmental Protection Agency published a Notice of Availability in the *Federal Register* which marked the beginning of the formal 90-day public comment period on the Draft RMP/Environmental Impact Statement (EIS). The public was informed of the availability of the Draft RMP/EIS via news releases, the planning website, and the RMP mailing list. The Draft RMP/EIS as well as all the background documents and reports were available on the Moab RMP planning website. Both electronic and hard copies of the Draft RMP/EIS were made available to the public. Five open houses were held during the 90 day comment period. The Moab Field Office received over 33,000 comment submissions on the Draft RMP/EIS. These comments were considered in the preparation of the Proposed RMP/Final EIS.

On August 1, 2008, the BLM and the Environmental Protection Agency published of Notice of Availability in the *Federal Register* which announced the publication of the Proposed RMP/Final EIS. The public was informed of the availability of the Proposed RMP/FEIS via news releases, the planning website and the RMP mailing list. The Proposed RMP/FEIS as well as all the background documents were available on the Moab RMP planning website. A 30 day protest period commenced on August 1, 2008 and ended on September 2, 2008. In addition, a 60-day Governor’s Consistency Review period began when the protest period commenced.

In-depth information on these efforts is included in both the Moab Draft RMP/EIS and Moab Proposed RMP/Final EIS in Chapter 5, *Consultation and Coordination*.

The BLM will continue to actively seek the views of the public using techniques such as news releases and web-sites (including the Electronic Notification Bulletin Board) to ask for participation and inform the public of new and ongoing project proposals, site-specific planning, and opportunities and timeframes for comment. The BLM will also continue to coordinate, both formally and informally, with the numerous state, federal, tribal, and local agencies and officials interested and involved in the management of public lands in Grand and San Juan Counties.

K. AVAILABILITY OF THE PLAN

Copies of the Record of Decision and the Moab Field Office Approved Resource Management Plan are available by request from the following locations: BLM Moab Field Office, 82 East Dogwood, Moab, Utah 84532 (435)-259-2100, and on the Moab Field Office website at www.blm.gov/ut/st/en/fo/moab.html.

APPROVAL

In consideration of the foregoing, I approve the Record of Decision for the Moab Field Office Resource Management Plan.

A handwritten signature in black ink, appearing to read "C. Stephen Allred", is written over a horizontal line.

C. Stephen Allred
Assistant Secretary – Land and Minerals Management
Department of the Interior

OCT 31 2008

Date

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APPROVED RESOURCE MANAGEMENT PLAN

A. INTRODUCTION

This Approved RMP replaces the Grand Resource Area Resource Management Plan approved in 1985 and is now the base land use plan for public lands administered by the BLM's Moab Field Office. The Approved RMP adopts the management described in Proposed Plan and the Management Common to All Alternatives section presented in the Proposed Moab RMP/Final EIS (USDI-BLM 2008), with adjustments as described in the *Notice of Modifications and Clarifications Made to the Approved RMP* section of the ROD.

B. CONSIDERATION OF OTHER PLANS AND POLICIES

The BLM has considered the following plans and policies in formulating the Approved RMP:

State of Utah

- Dead Horse Point State Park Resource Management Plan
- Plans of the Utah School and Institutional Trust Lands Administration (SITLA)
- Regional plans of the Utah Department of Transportation (UDOT)
- State of Utah plans relating to water management, water quality, nonpoint source pollution, watershed management, and air quality
- Utah's State Comprehensive Outdoor Recreation Plan (SCORP)

County Land Use Plans

- San Juan County, Utah: San Juan County Master Plan (1996 and 2008)
- Grand County, Utah: Grand County General Plan Update (2004)

Other Federal Plans

- Canyonlands National Park Natural Resource Management Plan
- Canyonlands National Park general management plans (NPS 1974, 2003, 2006)
- Canyonlands National Park backcountry management plan (1984, 1995)
- Land and Resource Management Plan, Manti-La Sal National Forest (USDA [USFS] 1986)
- General Management Plan and Development Concept Plan: Arches National Park (NPS 1989)
- RMPs for the BLM Vernal, Grand Junction, Uncompahgre, Dolores, Monticello, and Price field offices (BLM 1985b, 1985c, 1985d, 1987, 1989a, 1991, 1993a)
- McInnis Canyons National Conservation Area Management Plan (BLM 2003a)
- Remediation of the Moab Uranium Tailings, Grand and San Juan Counties, Utah EIS (DOE 2005);

Endangered Species Recovery Plans

- Endangered species recovery plans are prepared by the U.S. Fish and Wildlife Service to promote the recovery of threatened and endangered species
- Colorado Pikeminnow Recovery Plan (USFWS 1978, 1990, 1991, 2002a)
- Humpback Chub Recovery Plan (USFWS 1979, 1990a, 2002b)
- Northern States Bald Eagle Recovery Plan (USFWS 1983)
- Bonytail Chub Recovery Plan (USFWS 1984, 1990b, 2002c)
- Recovery Implementation Program EA for the Endangered Fish Species in the Upper Colorado River Basin (USFWS 1987)
- Black-footed Ferret Recovery Plan (USFWS 1988)
- Mexican Spotted Owl Recovery Plan (USFWS 1995)
- Razorback Sucker Recovery Plan (USFWS 1999, 2002d)
- Final Recovery Plan for the Southwestern Willow Flycatcher (USFWS 2002e)

Energy Policy and Conservation Act (EPCA)

Under this directive, the Assistant Secretary of the Interior for Land and Minerals Management delivered to Congress an inventory of U.S. oil and gas resources in five western basins, as well as the extent and nature of any restrictions or impediments to their development. This report was prepared at the request of Congress under the provisions of the 2000 Energy Policy and Conservation Act (EPCA).

In April 2003, the BLM specified four EPCA integration principles, as follows:

- Environmental protection and energy production are both desirable and necessary objectives of sound land management practices and are not to be considered mutually exclusive priorities.
- The BLM must ensure appropriate accessibility to energy resources necessary for the nation's security, while recognizing that special and unique non-energy resources can be preserved.
- Sound planning will weigh the relative resource values, consistent with the multiple use and sustained yield mandates required by FLPMA.
- All resource impacts, including those associated with energy development and transmission, will be mitigated to prevent unnecessary or undue degradation.

Energy Policy Act of 2005 and the Western Energy Corridor Programmatic EIS (PEIS)

Section 368 of the Energy Policy Act of 2005 (designation of West-wide energy corridors) is being implemented via the current development of an interagency, Programmatic EIS (PEIS).

Memorandum of Understanding (MOU) Between the U.S. Department of the Interior; the Bureau of Land Management (BLM); and the U.S. Department of Agriculture, U.S. Forest Service concerning Oil and Gas Leasing Operations

The purpose of this Memorandum of Understanding (MOU) is to establish joint BLM and Forest Service policies and procedures for managing oil and gas leasing and operational activities

pursuant to oil and gas leases on National Forest Service (NFS) lands, consistent with applicable law and policy. The MOU was signed in 2006 for the purpose of efficient, effective compliance with statutory and regulatory requirements. The MOU establishes the roles of the Forest Service and the BLM in processing Applications for Permits to Drill and review of subsequent operations.

Other BLM Plans and Policies

Other BLM plans and policies considered in formulating the Approved RMP are listed below:

- Grazing Amendment to RMP (Livestock conversions) (1988); (changed by the Approved RMP)
- Grand Resource Area RMP Oil and Gas Supplemental Environmental Assessment (1988); (changed by the Approved RMP)
- Bighorn Sheep Amendment (1990, 1993b)
- Colorado Riverway Recreation Area Management Plan (1992a)
- Sand Flats Recreation Management Plan (1994a)
- Livestock Grazing Use Adjustments (1996)
- Ken's Lake Recreation Plan (2007)
- Utah's Colorado Riverway Special Management Recreation Area Amendment (2001a)
- Mill Creek Canyon Management Plan (2001b)
- Canyon Rims Recreation Area Management Plan (2003b)
- Three Rivers Withdrawal (2004b)
- Cameo Cliffs Special Recreation Management Area Plan (2005b)
- Normal Year Fire Rehabilitation and Stabilization Plan (2006a)
- Moab District Fire Management Plan (2006b)
- Interim Policy for Lands Under Wilderness Review, (IMP; USDI-BLM 1995)
- Utah BLM Statewide Wilderness EIS (1990)
- Wild and Scenic River Study Colorado and Lower Dolores Rivers EIS (NPS 1979)
- Lisbon Valley Copper Project EIS (BLM 1997)
- Questar Williams and Kern River Pipeline Project EIS (BLM 2001c)
- Vegetation Treatment on BLM Lands in Thirteen Western States (1991a)
- Final Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement and Associated Record of Decision, USDI, Bureau of Land Management, 2007 (FES 07-21)

Habitat Management Plans (HMP)

A Habitat Management Plan (HMP) provides guidance for the management of a defined habitat for a target wildlife species, protecting and improving habitat for that species and for other species utilizing the habitat. These plans are usually written in coordination with the Utah Division of Wildlife Resources; those pertaining to the Moab planning area are as follows:

- Cisco Desert HMP (1985a)
- Hatch Point HMP (1985b)
- Dolores Triangle HMP (1985c)
- The Potash-Confluence HMP (1986)

In the event there are inconsistencies or discrepancies between previously Approved RMPs and this Approved RMP, the decisions contained in the Approved RMP will be followed. The Moab Field Office will continue to tier to statewide, national, and programmatic EISs and other NEPA and planning documents, as well as consider and apply Best Management Practices or other management protocols contained in other planning documents after appropriate site-specific analysis.

All future resource authorizations and actions will conform to, or be consistent with the decisions contained in this Approved RMP. All existing operations and activities authorized under permits, contracts, cooperative agreements or other authorizations will be modified, as necessary, to conform with this plan within a reasonable timeframe. However, this plan does not repeal valid existing rights on public lands. A valid existing right is a claim or authorization that takes precedence over the decisions developed in this plan. If such authorizations come up for review and can be modified, they will also be brought into conformance with the plan.

While the Final EIS for the Moab RMP constitutes compliance with NEPA for the broad-scale decisions made in this Approved RMP, the BLM will continue to prepare Environmental Assessments (EAs) and Environmental Impacts Statements (EISs) where appropriate as part of implementation level planning and decision-making.

C. PLAN IMPLEMENTATION

Plan implementation is a continuous and active process. Decisions presented in the *Management Decisions* section of this Approved RMP are of three types: Immediate, One-Time, and Long-Term.

Immediate Decisions: These decisions go into effect upon signature of the Record of Decision and Approved RMP. These include decisions such as the allocation of lands as available or unavailable for oil and gas leasing, ACEC designations, and OHV designations. Immediate decisions require no additional analysis and provide the framework for any subsequent activities proposed in the planning area. Proposals for actions such as oil and gas leasing, land adjustments, and other allocation-based actions will be reviewed against these decisions/allocations to determine if the proposal is in conformance with the plan.

One-Time Decisions: These types of decisions include those that are implemented after additional site-specific analysis is completed. Examples are implementation of the recommendations to withdraw lands from locatable mineral entry or development of a habitat management plan or a special recreation management area plan. One-time decisions usually require additional analysis and are prioritized as part of the BLM budget process.

Long-Term Guidance/Life of Plan Direction: These decisions include the goals, objectives, and management actions established by the plan that are applied during site-specific analyses and activity planning. This guidance is applied whether the action is initiated by the BLM or by a non-BLM project proponent. Long-term guidance and plan direction is incorporated into BLM

management as implementation level planning and project analysis occurs (for example, as a result of the watershed assessment process or receipt of a land use application).

Priorities for implementation of "one-time" RMP decisions will be based on several criteria, including:

- Current and projected resource needs and demands
- National and Statewide BLM management direction and program emphasis and
- Funding

General Implementation Schedule of "One-Time" Actions

Decisions in this plan will be implemented over a period of years depending on budget and staff availability. After issuing the ROD/Approved Plan, BLM will prepare an implementation plan that establishes tentative timeframes for competition of "one-time" actions identified in the Approved RMP. Most of these actions require additional analysis and site specific activity planning. This schedule does not include the decisions which are effective immediately upon approval of the plan (usually allocations), or the actions which describe the ongoing management that will be incorporated and applied as site-specific proposals are analyzed on an ongoing basis. This schedule will assist BLM managers and staff in preparing budget requests and in scheduling work. However, the proposed schedule must be considered tentative and will be affected by future funding, changing program priorities, non-discretionary workloads, and cooperation by partners and external publics. Periodic review of the plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

Maintaining the Plan

Land use plan decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, and/or clarifying previously approved decisions. Some examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or tabular data errors
- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district, refining the known habitat of special status species or big game crucial winter ranges, or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes)
- Applying an existing oil and gas lease stipulation to a new area prior to the lease sale based on new inventory data (e.g., apply an existing protective stipulation for sage-grouse to a newly discovered sage-grouse lek.)

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, best management practices, and scientific principles. Where monitoring shows land use plan actions or best management practices are not effective, minor modifications

or adjustments may occur without amendment or revision of the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed.

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the NEPA analysis required for making new land use plan decisions.

Changing the Plan

The Approved RMP may be changed, should conditions warrant, through a plan amendment or plan revision process. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide the impetus for an amendment. Generally, an amendment is issue-specific. If several areas of the plan become outdated or otherwise obsolete, a plan revision may become necessary. Plan amendments and revisions are accomplished with public input and the appropriate level of environmental analysis conducted according to the Council on Environmental Policy procedure for implementation of the National Environmental Policy Act.

D. PLAN EVALUATION

Evaluation is a process in which the plan and monitoring data are reviewed to see if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there is new data of significance to the plan, and if decisions should be changed through amendment or revision. Monitoring data gathered over time is examined and used to draw conclusions on whether management actions are meeting stated objectives, and if not, why. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet objectives.

BLM will use land use plan evaluations to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluation of the RMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation. The following estimated evaluation schedule will be followed for the Moab RMP:

- September 2013
- September 2018
- September 2023
- September 2028

Evaluations will follow the protocols established by the BLM Land Use Planning Handbook (H-1601-1) or other appropriate guidance in effect at the time the evaluation is initiated.

E. MANAGEMENT DECISIONS

This section of the Approved RMP presents the goals and objectives, land use allocations, and management actions established for public lands managed by the BLM's Moab Field Office. These management decisions are presented by program area. Not all types of decisions were identified for each program. A *Monitoring* section is also included for each program (in Appendix E) to describe how the program decisions will be tracked to ensure implementation.

Data used in development of the Approved RMP are dynamic. The data and maps used throughout the Approved RMP are for land use planning purposes and will be refined as site-specific planning and on-the-ground implementation occurs. Updating data is considered plan maintenance which will occur over time as the RMP is implemented (see the section on *Plan Implementation*). Please note that all acreages presented in the Approved RMP are estimations, even when presented to the nearest acre.

This section is organized alphabetically by program area with the following titles. For ease of identification into the future, each program area has an identified abbreviation (see below) and each decision in that program is numbered in coordination with the abbreviation:

- Air Quality—**AQ**
- Cultural Resources—**CUL**
- Fire and Fuels Management—**FIRE**
- Health and Safety—**HAZ**
- Lands and Realty—**LAR**
- Livestock Grazing—**GRA**
- Minerals—**MIN**
- Non-WSA Lands with Wilderness Characteristics—**WC**
- Paleontological Resources—**PAL**
- Riparian—**RIP**
- Recreation—**REC**
- Soil and Water Resources—**SOL/WAT**
- Special Designations: Areas of Critical Environmental Concern—**ACEC**
- Special Designations: Wild and Scenic Rivers—**WSR**
- Special Designations: National Trails and Backways—**TRA**
- Special Designations: Designated Wilderness—**DW**
- Special Designations: Wilderness Study Areas—**WSA**
- Special Status Species—**SSS**
- Travel Management—**TRV**
- Vegetation—**VEG**
- Visual Resources—**VRM**
- Wildlife and Fish—**WL**
- Woodland and Forestry Products—**FOR**

Maps depicting the management decisions are provided at the back of the Approved RMP for easy reference

AIR QUALITY (AQ)**Goals and Objectives:**

Maintain existing air quality and air quality related values (e.g., visibility) by ensuring that all authorized uses on public lands comply with and support Federal, State, and local laws and regulations for protecting air quality.

Management Decisions:**AQ-1**

As appropriate, quantitative analysis of potential Air Quality impacts will be conducted for project-specific developments.

AQ-2

Prescribed burns will be consistent with the State of Utah Division of Environmental Quality (UDEQ) permitting process and timed so as to minimize smoke impacts.

AQ-3

Comply with Utah Air Conservation (UAC) Regulation R446-1. The best air quality control technology, as per guidance from the Utah Division of Air Quality (UDAQ), will be applied to actions on public lands as needed to meet air quality standards.

AQ-4

Comply with UAC Regulation R446-1-4.5.3, which prohibits the use, maintenance, or construction of roadways without taking appropriate dust abatement measures. Compliance will be obtained through special stipulations as a requirement on new projects and through the use of dust abatement control techniques in problem areas.

AQ-5

Manage all BLM and BLM-authorized activities to maintain air quality within the thresholds established by the State of Utah Ambient Air Quality Standards and to ensure that those activities continue to keep the area as attainment, meet prevention of significant deterioration (PSD) Class II standards, and protect the Class I air shed of the National Parks (e.g., Arches and Canyonlands National Parks).

AQ-6

Comply with the current Smoke Management Memorandum of Agreement (MOU) between BLM, USFS, and UDAQ. The MOU, in accordance with UAC regulation R446-1-2.4.4, requires reporting size, date of burn, fuel type, and estimated air emissions from each prescribed burn.

AQ-7

BLM will continue to work cooperatively with state, federal, and tribal entities in developing air quality assessment protocols to address cumulative impacts and regional air quality issues.

AQ-8

BLM will continue to work cooperatively with the Utah Airshed Group to manage emissions from wildland and prescribed fire activities.

AQ-9

National Ambient Air Quality Standards are enforced by the Utah Department of Environmental Quality, Division of Air Quality (UDEA-DAQ), with EPA oversight. Special requirements to reduce potential air quality impacts will be considered on a case-by-case basis in process land use authorizations.

AQ-10

BLM will utilize BMPs and site specific mitigation measures, when appropriate, based on site specific conditions, to reduce emissions and enhance air quality. Examples of these types of measures can be found in the Four Corners Air Quality Task Force Report of Mitigation Options, November 1, 2007.

AQ-11

Project specific analyses will consider use of quantitative air quality analysis methods (i.e. modeling), when appropriate as determined by BLM, in consultation with state, federal and tribal entities.

CULTURAL RESOURCES (CUL)**Goals and Objectives:**

Identify, preserve and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations (FLPMA, Section 103(c), 201(a) and (c); National Historic Preservation Act, Section 110(a); Archaeological Resources Protection Act, Section 14(a)).

Seek to reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration, or potential conflict with other resource uses (FLPMA, Section 103(c), National Historic Preservation Act, Sections 106, 110(a)(2)) by ensuring that all authorizations for land use and resource use will comply with the NHPA Section 106.

Management Decisions:**CUL -1**

The BLM will comply with all pertinent statutes, regulations, formal agreements, Executive Orders, and policy as it applies to cultural resource management for all actions resulting from decisions in this land-use plan.

CUL-2

Protect burial sites, associated burial goods, and sacred items in accordance with the Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act.

CUL-3

Native American requests to practice traditional activities on public lands will be considered on a case-by-case basis and will be allowed where practical and appropriate. Reasonable access to specific sacred sites will be allowed under the American Indian Religious Freedom Act.

CUL-4

All treaty and trust responsibilities as they apply to public lands within the resource area will be honored.

CUL-5

All land-disturbing activities within Traditional Cultural Properties will be designed to avoid or minimize impacts, where reasonable. Proposed projects or actions will be modified to avoid the area or site, avoid time of use by Native American groups, or will be eliminated altogether. Cultural sites may be closed to visitation when it is determined that this visitation is endangering site integrity.

CUL-6

Camping will be prohibited and posted within or on archaeological and historic sites eligible for listing on the National Register of Historic Places.

CUL-7

Class III inventory is not required prior to designations that allow continued use of an existing route, impose new limitations on an existing route, close an open area or travel route, keep a closed area closed, or keep an open area open.

CUL-8

Class III cultural resources inventory will be conducted on newly designated ATV, motorcycle and mountain bike routes (48" wide or less) based on potential resource conflicts. Routes identified for survey will be prioritized based on landscape level overviews, cultural resource predictive models, and available site location, environmental, and contextual information. If eligible archaeological sites along these routes are being adversely impacted by continued route use, impacts will be mitigated. "New routes" are defined as those designated in the Travel Plan accompanying this RMP.

CUL-9

Where there is a reasonable expectation that a proposed route designation would shift, concentrate or expand travel into areas where historic properties are likely to be adversely affected, Class III inventory and compliance with Section 106, focused on areas where adverse effects are likely to occur, is required prior to designation.

CUL-10

Proposed designations of new routes will require Class III inventory of the Area of Potential Effect (APE) and compliance with Section 106 prior to designation. Class III inventory of the APE and compliance with Section 106 will also be required prior to identifying new locations proposed as staging areas or similar areas of concentrated OHV use.

CUL-11

Eligible cultural sites will be protected and impacts mitigated when it is determined that they are being impacted from grazing activities.

CUL-12

New field inventories will be prioritized in areas of special cultural designation (e.g., ACECs, National Historic Trails, National Historic Landmarks) that have not been fully inventoried.

CUL-13

Sego Rock Art Site and Wall Street/Colorado River Rock Art District, which have educational and recreational values, will be developed for public visitation and interpretation as long as such work does not contribute to the deterioration or destruction of the resources being interpreted. Work will be conducted in partnership with universities, museums, Tribes, and interested site stewards for the creation of interpretive materials on the archaeology of the Moab Planning Area.

CUL-14

Specific management plans will be developed for up to seven culturally sensitive areas unless integrated into other activity plans. These plans will also include, but will not be limited to, developing a site monitoring system; identifying sites in need of stabilization, restoration, and protective measures (e.g., fences, surveillance equipment); developing research designs for selected sites/areas; and developing specific mitigation measures.

CUL-15

Cooperate with counties to ensure county road and trail construction and maintenance activities avoid or minimize impacts to cultural resources.

CUL-16

Cultural plants, once identified by interested tribes, will be managed to insure that ground-disturbing activities on the land do not contribute to the decline of cultural sensitive plant communities. Collection of plant resources will be considered on a case-by-case basis and will be allowed where practical and appropriate.

CUL-17

Cultural resource management priority for the Ten Mile Wash and Mill Creek Canyon will be scientific research of prehistoric sites and cultural landscapes. Manage the Mill Creek planning area in accordance with the Mill Creek Management Plan (2001b).

CUL-18

Continue to allocate cultural sites, including ethnographic properties, to one of six management categories: a) scientific use; b) conservation for future use; c) traditional use; d) public use; e) experimental use; and f) discharged from management.

CUL-19

Alternative management strategies for cultural resources are disclosed in the Special Designations sections. This section identifies areas with substantial cultural resources and alternative management prescriptions to protect these resources. These areas include the Behind the Rocks, Ten Mile Wash, and Mill Creek Canyon ACECs, and the Wall Street portion of Highway 279/Shafer Basin/Long Canyon proposed ACEC.

CUL-20

Cultural use allocations will be made at the time of site documentation; allocations can be changed as new information or management direction becomes available, subject to consistency with the approved plan.

CUL-21

Cultural management plans will be a component of the implementation plans for the Labyrinth Canyons, Colorado Riverway and South Moab SRMAs. Heritage tourism may be considered in these cultural management plans.

CUL-22

Priority for new field inventory will be a 0.50-mile vulnerability zone surrounding cities and towns.

CUL-23

Prioritize for Class II and Class III surveys a total of 30,000 acres within the following areas: Bookcliffs, Dolores Triangle, North Fork of Mill Creek, South Fork of Mill Creek, Seven Mile, and Ten Mile Wash and its tributaries.

CUL-24

To prevent further degradation from occurring, target the following areas for restoration of damaged cultural resources: South and North Forks of Mill Creek, Bartlett/Hidden Canyon, Hell Roaring uplands, Ten Mile Wash and Wall Street Rock Art District.

CUL-25

The following sites will be hardened and interpreted for public use: one site in Lower Kane Springs Canyon, and 3 sites in the Wall Street Rock Art District.

FIRE MANAGEMENT (FIRE)**Goals and Objectives:**

Fire management will adopt the comprehensive Utah Land-use Plan Amendment for Fire and Fuels Management, September 2005 (LUP Amendment; BLM 2005c). This document may be found at www.ut.blm.gov/fireplanning/index/htm. Direction and guidance approved by the LUP Amendment is carried forward under all alternatives and incorporated by reference into this PRMP/FEIS. The content and purpose of the LUP Amendment is summarized as follows:

- Establishes landscape-level, fire management goals and objectives.
- Describes Desired Wildland Fire Conditions (DWFC) and the management strategies and actions to meet DWFC goals.
- Describes areas where fire may be restored to the ecosystem through wildland fire use for resource benefit and areas where wildland fire use is not appropriate.
- Identifies Resource Protection Measures (RPMs) for fire management practices to protect natural and cultural resource values.
- Identifies criteria used to establish fire management priorities.

Management Decisions:**FIRE-1**

The Moab Fire District Fire Management Plan (FMP) will be updated and amended to meet the direction and objectives of the RMP.

FIRE-2

Firefighter and public safety are the primary goals in all fire management decisions and actions.

FIRE-3

Wildland fire will be utilized to protect, maintain and enhance resources and, when possible, will be allowed to function in its natural ecological role.

FIRE-4

Hazardous fuels reduction treatments will be used to restore ecosystems; protect human, natural and cultural resources; and reduce the threat of wildfire to communities.

FIRE-5

Fires will be suppressed at minimum cost, taking into account firefighter and public safety as well as benefits and values to be protected that are consistent with resource objectives.

FIRE-6

The BLM will implement a consistent, safe and cost-effective fire management program through appropriate planning, staffing, training, and equipment.

FIRE-7

Fire management objectives will be established for every area with burnable vegetation, based on sound science and consideration of other resource objectives.

FIRE-8

Emergency stabilization, rehabilitation, and restoration efforts will be implemented to protect and sustain resources, public health and safety, and community infrastructure.

FIRE-9

The BLM will work together with partners and other affected groups and individuals to reduce risks to communities and to restore ecosystems.

FIRE-10

The Reasonable and Prudent Measures and Terms and Conditions identified in consultation with the USFWS for the LUP Amendment will be implemented in fire-related actions.

FIRE-11

Criteria for Establishing Fire Management Priorities: Protection of human life is the primary fire management priority. Establishing a priority among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources is based on human health and safety, the values to be protected, and the costs of protection. When firefighters and other personnel have been committed to an incident, these human resources become the highest values to be protected. Priorities for all aspects of fire management decisions and actions are based on the following:

- Protecting the Wildland-Urban Interface (WUI; including At-risk Communities and At-risk Watersheds).
- Maintaining existing healthy ecosystems.
- High priority sub-basins (HUC-4) or watersheds (HUC-5).
- Threatened, endangered, or special species.
- Cultural resources and/or cultural landscapes.

FIRE-12

Suppression: An "Appropriate Management Response" (AMR) procedure is required for every wildland fire that is not a prescribed fire. In all fire management decisions, strategies and actions, firefighter and public safety are the highest priority followed by consideration of benefits and values to be protected as well as suppression costs. The AMR can range from full suppression to managing fire for resource benefit (wildland fire use). Resource goals and objectives outlined in the RMP guide the development and implementation of AMR fire management activities in regard to the accomplishment of those objectives. The FMP establishes fire suppression objectives with minimum and maximum suppression targets for each Fire Management Unit (FMU) within the MPA. While firefighter and public safety are the first priority, considerations for suppression activities also include fire intensity, acreage, and spread potential, threats to life and property, potential to impact high-value resources such as critical habitat for threatened, endangered and sensitive species, crucial wildlife habitat, cultural resources and/or riparian

areas, historic fire regimes, and other special considerations such as wilderness and/or adjacent agency lands.

FIRE-13

Wildland Fire Use for Resource Benefit: Wildland fire is authorized as a tool, when appropriate, to allow naturally ignited wildland fire to accomplish specific resource management objectives. Due to existing resource conditions and proximity to values at risk, fire cannot be allowed to resume its natural role on all BLM lands in the MPA. Consideration of ongoing management actions and other natural changes will direct periodical reassessment of DWFC and determination of potential areas for wildland fire use. Operational management of wildland fire use is described in the Wildland Fire Implementation Plan (WFIP).

The FMP identifies areas (FMUs) that may have the potential for wildland fire use. Wildland fire use may be authorized for all areas, except when the following resources and values may be negatively impacted and there are no reasonable Resource Protection Measures to protect such resources and values:

- WUI areas.
- Areas that are known to be highly susceptible to post-fire cheatgrass or invasive weed invasion.
- Important terrestrial and aquatic habitats.
- Non-fire-adapted vegetation communities.
- Sensitive cultural resources.
- Areas of soil with high or very high erosion hazard.
- Class I air attainment areas and PM-10 non-attainment areas.
- Administrative sites.
- Developed recreation sites.
- Communication sites.
- Oil, gas and mining facilities.
- Above-ground utility corridors.
- High-use travel corridors, such as interstates, railroads, and/or highways.

FIRE-14

Fuels Treatment: Fuels management activities outlined in the FMP will be consistent with the resource goals and objectives contained in the RMP. To reduce hazards and to restore ecosystems, authorized fuels management actions include wildland fire use, prescribed fire, and mechanical, manual, chemical, biological, and seeding treatments. The FMP describes fuels management goals and objectives and the full range of fuels management strategies and actions authorized for fuels reduction. Fuels treatments are focused on the DWFC of restoring historic fire regimes to ecosystems when feasible, so that future wildland fire use actions can be more easily implemented. Fuels management actions may include but are not limited to the following activities:

- Mechanical treatments such as mowing, chopping, or chipping/grinding (brush cutter), chaining, tilling, or cutting.
- Manual treatments such as hand-cutting (chainsaw or handsaw) and hand-piling.

- Prescribed fire including broadcast, underburn, and hand-pile burning.
- Chemical spraying or biological treatments such as insects or goats/sheep.
- Seeding including aerial or ground application (manual or mechanical).

Targeted areas may be treated in phases over a period of several years and may involve multiple and varied treatments.

Estimated fuels reduction treatments of 5,000 to 10,000 acres/year are targeted dependent on budgetary and time constraints. These treatments are in addition to those to be accomplished under the Utah Watershed Restoration Initiative and the National Healthy Lands Initiative.

Implementation of fuels management actions will be prioritized using the following criteria:

- WUI areas.
- Areas with fuel loading that could potentially result in the loss of ecosystem components following wildland fire.
- Resource management goals and objectives.

FIRE-15

Prevention and Mitigation: Prevention and mitigation goals target a reduction in unauthorized wildland fire ignitions. Goals include coordination with partners and affected groups and individuals, and a wide range of prevention and mitigation activities such as personal contacts, mass media, signing, and defensible space education. Implementation of fire prevention activities will be prioritized using the following criteria:

- WUI areas.
- Major travel corridors.
- Recreation sites.
- Public lands as a whole.

FIRE-16

Emergency Stabilization and Rehabilitation (ESR): A Normal Year Fire Stabilization and Rehabilitation Plan (NFRP) is in place to meet emergency stabilization and rehabilitation (ESR) needs and to comply with up-to-date ESR policy and guidance. The NFRP is a programmatic implementation plan authorizing treatment options specific to vegetative communities and dependent upon post-wildland fire conditions and other site-specific considerations. Treatment actions are designed according to the type and severity of wildfire impacts and priorities include, but are not limited to, areas where the following criteria apply:

- It is necessary to protect human life and safety as well as property.
- Unique or critical cultural and/or historical resources are at risk.
- It is determined soils are highly susceptible to accelerated erosion.
- Perennial grasses and forbs (fire-tolerant plants) are not expected to provide soil and watershed protection within two years.
- There is a need to establish a vegetative fuel break of less flammable species (greenstrips).

- Unacceptable vegetation, such as noxious weeds, may readily invade and become established.
- Shrubs and forbs are a crucial habitat component for wintering mule deer, pronghorn, sage-grouse, or other special status species.
- Stabilization and rehabilitation are necessary to meet RMP resource objectives, including rangeland seedings.
- It is necessary to protect water quality.
- It is necessary to quickly restore threatened, endangered, or special species habitat populations to prevent adverse impacts.

HEALTH AND SAFETY (HAZ)**Goals and Objectives:**

BLM will strive to ensure that human health and safety concerns on public lands remain a major priority.

Management Decisions:**HAZ-1**

Comply with all applicable Abandoned Mine Lands (AML) policies.

HAZ-2

In conformance with BLM's long-term strategies and national policies regarding Abandoned Mine Lands (AML), this RMP recognizes the need to work with our partners toward identifying and addressing physical safety and environmental hazards at all AML sites on public lands. In order to achieve this goal, a State strategy has been written. National program criteria for determining site priorities were used to develop the work plan. This State strategy is entitled "Utah's Abandoned Mine Land Multi Year Work Plan."

HAZ-3

The criteria that will be used to establish physical safety hazard program priorities are:

- The AML physical safety program's highest priority will be the cleaning up of those AML sites where (a) a death or injury has occurred, (b) the site is situated on or in immediate proximity to developed recreation sites and areas with high visitor use, and (c) upon formal risk assessment, a high or extremely high risk level is indicated.
- AML will be factored into future recreation management area designations, land-use planning assessments, and all applicable use authorizations.
- The site is presently listed or is eligible for listing in the Abandoned Mines Module of Protection and Response Information System.
- AML hazards should be, to the extent practicable, mitigated or remediated on the ground during site development.

HAZ-4

The criteria used to establish water quality-based AML program priorities are:

- The State has identified the watershed as a priority based on (a) one or more water laws or regulations; (b) threat to public health or safety; and (c) threat to the environment.
- The project reflects a collaborative effort with other land managing agencies.
- The site is presently listed or is eligible for listing in the Abandoned Mines Site Cleanup Module of Protection and Response Information System.
- The project will be funded by contributions from collaborating agencies.

HAZ-5

Identify and clean up unauthorized dumping sites and hazardous materials spills in the MPA as required to comply with applicable State, local, and Federal regulations.

HAZ-6

The State Multi Year Work Plan will be maintained and updated as needed to reflect current policy for identifying program physical safety and water quality AML sites priorities for reclamation and remediation.

LANDS AND REALTY (LAR)**Goals and Objectives:**

Retain lands under BLM administration except where necessary to accomplish resource goals and objectives outlined in the Plan. BLM would transfer lands out of Federal ownership or acquire non-Federal lands where needed to accomplish resource goals and objectives, improve administration of public lands, or meet essential community needs.

Meet public needs for use authorizations such as rights-of-way (ROWs), alternative energy sources, and permits while minimizing adverse impacts to resource values.

Using the Visual Resource Management (VRM) system, maintain generally undeveloped landscapes in the backgrounds of popular filming locations.

Management Decisions:**LAR-1**

Under IMP and Congressional action, Wilderness Study Areas and Wilderness Areas will be exclusion areas for any ROWs (Section 501(a) FLPMA).

LAR-2

Continue the withdrawal of lands along the Colorado, Dolores and Green Rivers (totaling 65,037 acres within the MPA) from mineral entry (Three Rivers Withdrawal, October 6, 2004). In addition, continue the Westwater (8,096 acres) and Black Ridge Wilderness (5,200 acres) withdrawals (see Map 5).

LAR-3

Give land exchanges with the State of Utah priority consideration to resolve inholding issues.

LAR-4

Areas of Critical Environmental Concern (ACECs) will be avoidance areas for any new ROWs (including communication sites and wind and solar sites).

LAR-5

Decisions on Land Tenure Adjustments and withdrawals will be made in accordance with the criteria contained in Appendix G.

LAR-6

Determinations on authorizing commercial filming in the MPA will be made in accordance with the criteria outlined in Appendix H for minimum impact filming and standard NEPA procedures for projects not meeting minimum impact criteria.

LAR-7

Right-of-way (ROW) avoidance and exclusion areas will be consistent with the stipulations identified in Appendix A for oil and gas leasing and other surface-disturbing activities. These stipulations have been developed to protect important resource values.

LAR-8

As per the State of Utah v. Andrus, Oct. 1, 1979 (Cotter Decision), the BLM will grant the State of Utah reasonable access to State lands for economic purposes, on a case-by-case basis.

LAR-9

To reduce surface use conflicts along the U.S. Highway 191 utility corridor within Moab Canyon, apply a no surface occupancy stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A), except those associated with utility ROWs.

LAR-10

Authorization of any ROW for wind or solar energy development will incorporate best management practices including the USFWS's "Guidelines for Wind Power" and provisions contained in the Final Wind Energy Programmatic EIS (June 24, 2005; BLM 2005d).

LAR-11

Both wind and solar energy development (renewable energy) can be considered wherever ROWs could be authorized.

LAR-12

To be consistent with the existing withdrawals from mineral entry, apply a no surface occupancy stipulation for oil and gas leasing and other surface-disturbing activities within the area of the Three Rivers and Westwater Mineral Withdrawals. This action will further protect the riparian, wildlife, scenic, and recreation values addressed in these withdrawals. Applying a no surface occupancy stipulation for oil and gas leasing to lands within the Three Rivers Withdrawal, in combination with other areas where a no surface occupancy stipulation is applied, results in tracts of land that are physically inaccessible to oil and gas operations. For this reason, portions of the lands within the Three Rivers Withdrawal (e.g., along the Colorado River near the Richardson Amphitheater and along the Dolores River near Beaver Creek) will be closed to oil and gas leasing. These areas will be managed as no surface occupancy for other surface-disturbing activities (see Appendix A).

LAR-13

Lands and/or interest in lands (such as minerals and conservation easements) acquired through future LTA will take on the management of the surrounding area. Land acquisitions will be pursued if they meet the criteria in Appendix G.

LAR-14

Designate an I-70 utility corridor that includes all major existing ROWs as identified in the RMP with a 1/2-mile width on each side of the widest ROW corridor. Designate the existing Moab Canyon utility corridor (Map 6).

LAR-15

Combine the two corridors south of Spanish Valley into a single corridor (Map 6). The corridor will include the approximately 2 to 3 miles separating the two segments.

LAR-16

About 370,250 acres will be exclusion areas for ROWs. About 217,480 acres will be avoidance areas for ROWs.

LAR-17

Parcels identified for disposal total 14,961 acres and are shown on Map 7 and in Appendix I.

LIVESTOCK GRAZING (GRA)**Goals and Objectives:**

Achieve the attainment of Standards for Rangeland Health and other desired resource conditions by maintaining appropriate utilization levels of the range through management prescriptions and administrative adjustments of grazing permits.

Achieve healthy, sustainable rangeland ecosystems that support the livestock industry while providing for other resource values such as wildlife habitat, recreation opportunities, clean water, and functional watersheds.

Management Decisions:**GRA-1**

Grazing will be managed according to the *Guidelines for Livestock Grazing Management* to meet the Standards for Rangeland Health, including adjustment in seasons of use.

GRA-2

On all allotments, allow allotment boundaries adjustments, joining and splitting, and modification of grazing season subject to appropriate NEPA review and analysis (see Map 8 for a map of grazing allotments).

GRA-3

Continue to authorize grazing at the current preference levels (as per ten-year grazing permits) and adjust, if necessary to meet Standards for Rangeland Health.

GRA-4

As amended in previous planning documents (the 1985 Grand RMP and a Plan Amendment analyzed in EA#068-94-047), grazing use will continue to not be authorized on the following allotments/areas (or portions of allotments/areas):

- Between The Creeks with 3,960 acres and 221 AUMs, to protect municipal watersheds, improve mule deer winter range, improve riparian habitat, and reduce recreation conflict.
 - North Sand Flats with 18,246 acres and 798 AUMs, to reduce recreation conflict, improve mule deer winter range, and improve riparian habitat.
 - South Sand Flats with 10,209 acres and 592 AUMs, to reduce recreation conflict, improve mule deer winter range, and improve riparian habitat.
 - A portion of Arth's Pasture Allotment (Poison Spider area) with approximately 7,634 acres and 425 AUMs, to improve desert bighorn sheep habitat and reduce recreation conflict.
 - Castle Valley with 6,074 acres and 190 AUMs, to protect the Castle Valley sole source aquifer, to improve mule deer winter range, and to reduce recreation conflict.
- Along Highway 128 from U.S. 191 to the Castle Valley Road, along U.S. 191 from Highway 313 to Moab, and along Highway 279 with 1,139 acres, to reduce recreation traffic conflict (no reduction in AUMs).

- A portion of the Kane Spring Allotment (that portion in Kane Spring Canyon between the open valley and the river; 558 acres and no reduction in AUMs), to reduce recreation traffic conflict and to enhance riparian species' habitat.
- An area along the Colorado River between Hittle Bottom and north of Dewey Bridge (400 acres and no reduction in AUMs), to reduce recreation traffic conflict and to enhance riparian species' habitat.

See also decisions at GRA-16.

GRA-5

Develop AMPs on seven allotments (Agate, Cisco, Cisco Mesa, Harley Dome, Highlands, Monument Wash, and San Arroyo) and on any additional allotments if resource issues are identified to benefit vegetation, wildlife, livestock grazing and soils.

GRA-6

Identify appropriate utilization levels based on allotment or site-specific management practices, such as season-of-use, grazing intensity and duration, and utilization patterns, as well as vegetative conditions, the presence or absence of range improvements, and resource issues or concerns. Use utilization levels as an indicator to evaluate if current grazing use is appropriate to meet resource objectives for the area. Generally moderate utilization levels (40–60%) will be used to indicate if general management objectives can be met. Utilization levels above those identified as appropriate will be used to adjust livestock use on a yearly basis through pasture and possible early removal from allotments as needed. Utilization levels may be especially important during periods of drought. Long-term adjustments to livestock use (term permits adjustments) require the evaluation of monitoring data including climate, actual grazing use, current or historic impacts, utilization mapping, and long-term trend data, as well as utilization levels.

GRA-7

Follow the recommendations of the National Sage-grouse Habitat Conservation Strategy (BLM 2004c) and the Strategic Management Plan for Sage-grouse (UDWR 2002) where applicable.

GRA-8

Conversion of allotments from cattle to domestic sheep will not be considered in recognized bighorn sheep habitat (see Maps 9 and 10).

GRA-9

Collect monitoring data, including trend, utilization, actual use, and climate data to determine if existing livestock management practices are meeting land-use planning and resource objectives.

GRA-10

Change class of livestock from sheep to cattle on the Hatch Point Allotment (96,951 acres) to benefit wildlife.

GRA-11

Rangelands that have been burned, reseeded, or otherwise treated to alter vegetative composition will have livestock grazing use temporarily suspended as follows: (1) burned rangelands,

whether by wildfire or prescribed burning, will be ungrazed for a minimum of one complete growing season following the burn; (2) rangelands that have been reseeded, or otherwise mechanically treated will be ungrazed for a minimum of two complete growing seasons following treatment.

GRA-12

Relinquishment of Preference: Voluntary relinquishments of grazing permits and preference, in whole or in part, submitted by a permittee in writing to the BLM, will be handled on a case-by-case basis. BLM will not recognize as valid, relinquishments which are conditional on specific BLM actions and BLM will not be bound by them. Relinquished permits and the associated preference will remain available for application by qualified applicants after BLM considers if such action will meet rangeland health standards and is compatible with achieving land-use plan goals and objectives. Prior to re-issuance of the relinquished permit, the terms and conditions may be modified to meet RMP goals and objectives and/or site-specific resource objectives. However, upon relinquishment, BLM may determine through a site-specific evaluation and associated NEPA analysis that the public lands involved are better used for other purposes. Grazing may then be discontinued on the allotment through an amendment to the existing RMP or a new RMP effort. Any decision issued concerning discontinuance of livestock grazing is not permanent and may be reconsidered and changed through future LUP Amendments and updates.

GRA-13

AUMs allotted to livestock: 106,479.

GRA-14

Acres available for grazing: 1,690,481 acres.

GRA-15

Acres not available for grazing: 132,047 acres (see Map 11).

GRA-16

Allotments Not Available for Grazing:

- Bogart with 14,744 acres and 209 AUMs (to benefit wildlife especially mule deer and/or elk habitat, riparian habitat, watershed health and erosive soils).
- Cottonwood with 27,193 acres and 900 AUMs (to benefit wildlife especially mule deer and/or elk habitat, riparian habitat, watershed health and erosive soils).
- Diamond with 18,620 acres and 588 AUMs (to benefit wildlife to benefit wildlife especially mule deer and/or elk habitat, riparian habitat, watershed health and erosive soils).
- Pear Park, with 14,201 acres and 200 AUMs (to benefit wildlife especially mule deer and/or elk habitat, riparian habitat, watershed health and erosive soils).
- Ida Gulch, with 3,612 acres 112 AUMs (to recreation conflict and enhance riparian habitat). Mill Creek with 3,921 acres and 137 AUMs (to reduce recreation and cultural conflict and to protect municipal watershed).
- Portions of Professor Valley and River along Highway 128**, with 1,467 acres and 0 AUMs (to reduce recreation conflict and enhance riparian habitat).

**A fence will be constructed along the southeast side of Highway 128 (set back to protect the scenic resources of the National Scenic Highway). This will result in all BLM lands between the Colorado River and Highway 128 being unavailable for grazing. This will reduce acreage in the allotments, but it will not reduce the AUMs, because the quality of the forage is low due to heavy use by motorists and other recreationists.

GRA-17**Allotments Currently Not Available for Grazing that will be Available for Grazing:**

- After allotment specific evaluation to assure resource objectives are met, Spring Creek Allotment will be available for livestock grazing.

GRA-18**Allotments Currently Not Available for Grazing that are to be Reconsidered for Allocation:**

- Beaver Creek with 1,351 acres and 0 AUMs.

GRA-19

Grazing in Saline Soils: Use grazing systems and develop AMPs to minimize impacts to saline soils and reduce salinity in the Colorado River drainage in the following allotments: Agate, Athena, Big Flat-Ten Mile, Cisco, Cisco Mesa, Coal Canyon, Crescent Canyon, Floy Creek, Harley Dome, Highlands, Horse Canyon, Little Grand, Lone Cone, Monument, and San Arroyo.

GRA-20

Grazing in Riparian Areas: Evaluate non-functioning and functioning-at-risk riparian areas using Standards for Rangeland Health and Guidelines for Livestock Grazing Management to determine if restriction from grazing will improve riparian functioning condition. The following riparian areas will be given priority for evaluation: Ten Mile from Dripping Spring to the Green River, Mill Creek, Day Canyon, Seven Mile Canyon, and East Coyote (a total of 1,169 acres).

GRA-21

Vegetation Treatments: Maintain the existing vegetation treatments (46,307 acres) to increase available forage within the following allotments. These areas have been treated over the past 50 years and consist primarily of pinyon-juniper woodlands. These areas will be treated by prescribed fire, chemical or mechanical or other means in accordance with BLM sagebrush conservation guidance and other applicable resource goals. The improved forage will benefit multiple use objectives including livestock and wildlife use. Allotments: Adobe Mesa, Big Triangle, Black Ridge, Buckhorn, Cisco, East Coyote, Fisher Valley, Granite Creek, Hatch Point, Lisbon, Lower Lisbon, Mountain Island, Rattlesnake South, Scharf Mesa, Spring Creek, Steamboat Mesa, Taylor, Windwhistle. (a total of 46,307 acres).

GRA-22

Conduct new vegetation treatments (6,900 acres) for increased forage in the following allotments with prescribed fire, chemical, mechanical or other means: Floy Canyon, Hatch Point, Lisbon, and Showerbath. Other vegetation treatments will be considered to benefit other resource values such as wildlife or watershed.

GRA-23

Implement Range Projects to Help Maintain Rangeland Health Standards:

- Implement range projects that will equally benefit livestock grazing and other resource values.

GRA-24

Grazing will be allowed on a limited basis in Ten Mile Wash downstream from Dripping Springs, with changes subject to future monitoring.

MINERALS (MIN)**Goals and Objectives:**

Provide opportunities for environmentally responsible exploration and development of mineral and energy resources subject to appropriate BLM policies, laws and regulations.

Establish conditions of use through land-use planning to protect other resource values.

Management Decisions:**MIN-1**

Continue the withdrawal of lands along the Colorado, Dolores, and Green Rivers, totaling 65,037 acres within the MPA, from mineral entry (Three Rivers Withdrawal, October 6, 2004). In addition, continue the Westwater (8,096 acres) withdrawal. Black Ridge Wilderness (5,200 acres) will remain closed, by law, to entry under the mining law.

MIN-2

Wilderness Study Areas and designated Wilderness (358,806 acres) will remain closed, by law, to mineral leasing and development.

MIN-3

Where public lands are sold or exchanged under 43 U.S.C. 682(B) (Small Tracts Act), 43 U.S.C. 869 (Recreation and Public Purposes Act), 43 U.S.C. 1718 (Sales) or 43 U.S.C. 1716 (Exchanges), the minerals reserved to the United States will continue to be removed from the operation of the mining laws unless a subsequent land-use planning decision expressly recommends restoring the land to mineral entry.

MIN-4

Leasable Minerals: Split-estate lands (private surface/Federal minerals) and lands administered by other Federal agencies are not managed by the BLM. The lands include about 29,678 acres of split-estate lands and the lands administered by the Manti-LaSal National Forest (141,241 acres). The surface owner or surface management agency (SMA) manages the surface. BLM administers the operational aspects of mineral leases. On lands administered by other Federal agencies, lease stipulations will include those required by the SMA. On 20,061 acres of split-estate lands, the BLM will apply the same lease stipulations as those applied to surrounding lands with Federal surface. BLM will close or impose a no surface occupancy stipulation on 9,617 acres of split-estate lands (see Appendix A). Mitigation measures to protect other resource values will be developed during the appropriate site-specific environmental analysis and will be attached as conditions of approval to permits in consultation with the surface owner or SMA.

MIN-5

Coal: The coal resources within the MPA include the Sego and the La Sal coal fields. Approximately 80% of the Sego coal field is within Wilderness Study Areas and is not available for development. For the remaining coal resources, no interest has been expressed for coal leasing and the potential for development of coal resources is low (see Mineral Potential Report). At such time as interest is expressed in coal leasing, the RMP will be amended as appropriate

and mining unsuitability criteria (43 CFR 3461) will be applied by the MFO before any coal leases are issued. If coal leases are issued, they will be subject to special conditions developed in the RMP and the unsuitability assessment. This may restrict all or certain types of mining techniques. Before any coal could be removed, MFO will have to approve the mining permit application package, incorporating stipulations developed in the RMP.

MIN-6

Locatable Minerals: Existing operations will continue to be subject to the stipulations developed for the notice or the plan of operations. The BLM will evaluate all operations authorized by the mining laws in the context of its requirement to prevent unnecessary and undue degradation of Federal lands and resources. Consistent with the rights afforded claimants under the mining laws, operations conducted after this RMP will be required to conform to the surface disturbing stipulations developed in this RMP.

MIN-7

Locatable Minerals: Operations on BLM-administered lands open to mineral entry must be conducted in compliance with BLM's surface management regulations (43 CFR 3715, 3802, 3809, and 3814). BLM surface management regulations do not apply to operations on other Federal lands but do apply to split-estate lands.

MIN-8

Leasable Minerals: To be consistent with the existing withdrawals from mineral entry, apply a no surface occupancy stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) within the area of the Three Rivers and Westwater Mineral Withdrawals. This action will further protect the riparian, wildlife, scenic, and recreation values addressed in these withdrawals.

MIN-9

Locatable Minerals: To the extent possible, the stipulations developed for oil and gas leasing are applicable to all mineral activities (leasable, locatable, and salable). These stipulations are found in Appendix A. Leasable minerals include oil and gas, coal, and potash. Locatable minerals include gold, copper, and uranium. Salable minerals include sand and gravel, clay, and building stone.

MIN-10

Locatable Minerals: In areas where mineral activities would be incompatible with existing surface use, apply a no surface occupancy stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A). These areas are as follows: Moab and Spanish Valley, Castle Valley (including Mayberry Orchard), Thompson Springs, Moab Landfill, Moab Airport, and Dead Horse Point State Park.

MIN-11

The Federal minerals within the incorporated city of Moab and town of Castle Valley are closed to oil and gas leasing by Federal regulation at 43 CFR 3100.0-3 (a)(2)(iii).

MIN-12

Leasable Minerals: The plan will recognize and be consistent with the National Energy Policy Act and related BLM policy by adopting the following objectives: recognizing the need for diversity in obtaining energy supplies; encouraging conservation of sensitive resource values; improving energy distribution opportunities.

MIN-13

Leasable Minerals: In accordance with an UDEQ-DAQ letter dated June 6, 2008 (See Appendix J) requesting implementation of interim nitrogen oxide control measures for compressor engines; BLM will require the following as a Lease Stipulation and a Condition of Approval for Applications for Permit to Drill: (1) All new and replacement internal combustion oil and gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NOx per horsepower-hour. This requirement does not apply to oil and gas field engines of less than or equal to 40 design-rated horsepower; (2) All new and replacement internal combustion oil and gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NOx per horsepower-hour.

MIN-14

Leasable Minerals: Lease stipulations have been developed to mitigate the impacts of oil and gas activity (see Appendix A and Map 12). The stipulations adhere to the Uniform Format prepared by the Rocky Mountain Regional Coordinating Committee in March 1989. Stipulations reflect the minimum requirements necessary to accomplish the desired resource protection and contain provisions/criteria to allow for exception, waiver and modification if warranted. Stipulations would be determined unnecessary if duplicative of Section 6 of the Standard Lease Terms. The BLM has identified Land-use Plan leasing allocations for all lands within the Moab Field Office. In addition, the Approved RMP describes specific lease stipulations and program-related Best Management Practices (both found in Appendix A: Stipulations and Environmental Best Practices Application to Oil and Gas Leasing and Other Surface Disturbing Activities) that apply to a variety of different resources.

MIN-15

Leasable Minerals: Oil and gas leases issued prior to the RMP will continue to be managed under the stipulations in effect when issued. Those issued subsequent to the plan will be subject to the stipulations developed in the plan. Environmental best management practices will be incorporated into subsequent permits and authorizations to mitigate impacts and conflicts with other uses and resource values (see Appendix A).

MIN-16

Leasable Minerals (Potash and Salt: Non-energy Leasable): Within the MPA, three areas fall within known potash leasing areas (KPLAs). KPLA designations, based on known geologic data, will remain in place until potash resources are depleted. In KPLAs, potash leases are acquired through competitive bidding. In areas where potash values are not known, MFO could issue prospecting permits, which could lead to issuance of a preference right lease. There are currently 8 leases and numerous pending prospecting permit applications within the MPA (Map 13). Additional KPLAs could be designated, based on geologic data, if interest warranted. Potash leasing and prospecting permits issued prior to the RMP will continue to be managed under the

stipulations in effect when issued. Those leases issued subsequent to the RMP will be consistent with the oil and gas leasing stipulations developed in the RMP (see Appendix A).

MIN-17

Locatable Minerals: A no surface occupancy stipulation cannot be applied to locatable minerals without a withdrawal. All public lands overlying Federal minerals are open to mining claim location unless specifically withdrawn from mineral entry by Secretarial order or by a public land law. Therefore, other than the existing withdrawals (Three Rivers, Westwater, and Black Ridge Wilderness), all public lands with the MPA remain open under the mining laws. Future withdrawals may be recommended in areas identified as closed or with a no surface occupancy stipulation if it becomes necessary to prevent unacceptable resource impacts.

MIN-18

Salable Minerals: There are currently 12 community pits totaling about 2,693 acres designated in the MPA (Map 14). Existing mineral material sale contracts, free use permits, and material sites, including community pits, will continue to be subject to the permit stipulation conditions. Sales, permits, community pits or common use areas issued or designated after the RMP will be subject to permit stipulations developed in the RMP. These stipulations will be the same as those stipulations for oil and gas leasing except that areas with a no surface occupancy stipulation and closed will be closed to the disposal of salable minerals.

MIN-19

Leasable Minerals: Oil and Gas Leasing stipulations (see Map 12):

- Approximately 427,273 acres will be open to oil and gas leasing, subject to standard terms and conditions.
- Approximately 806,994 acres will be open to oil and gas leasing subject to CSU and TL stipulations.
- Approximately 217,480 acres will be open to oil and gas leasing subject to an NSO stipulation.
- Approximately 370,250 acres will be closed to oil and gas leasing, of which 25,306 acres are outside Wilderness or Wilderness Study Areas. About 25,306 acres are closed to oil and gas leasing because it is not reasonable to apply an NSO stipulation. This includes areas where the oil and gas resources are physically inaccessible by current directional drilling technology from outside the boundaries of the NSO areas. (These lands closed to oil and gas leasing will be managed to preclude all other surface-disturbing activities.) Should technology change, a Plan Amendment will be initiated to place these 25,306 acres under an NSO stipulation for oil and gas leasing.
- In addition, 8,078 acres of Federal minerals (split-estate lands) will be managed as open to oil and gas leasing with an NSO stipulation, and 1,539 acres of Federal minerals (split-estate lands) will be closed to oil and gas leasing (see Appendix A).

MIN-20

Saleable Minerals (see Map 12):

- Approximately 427,273 acres will be open to the disposal of saleable minerals subject to standard terms and conditions.
- Approximately 806,994 acres will be open to the disposal of saleable minerals subject to CSU and TL stipulations.
- Approximately 217,480 acres will not be open to the disposal of saleable minerals (in those areas subject to an NSO stipulation for oil and gas leasing).
- Approximately 370,250 acres will be closed to the disposal of saleable minerals. In addition, 8,078 acres of Federal minerals (split-estate lands) will not be open to the disposal of saleable minerals in those lands subject to an NSO stipulation for oil and gas, and 1,539 acres of Federal minerals (split-estate lands) will be closed to the disposal of saleable minerals (see Appendix A).

MIN-21

Locatable Minerals:

- Approximately 427,273 acres are open to operations for locatable minerals subject to standard terms and conditions.
- Approximately 962,258 acres are open to operations for locatable minerals subject to CSU and TL stipulations.
- Approximately 78,333 acres are withdrawn from operations to locatable minerals.
- Approximately 353,510 acres within WSAs are open to operations for locatable minerals subject to the IMP (1650-1).

NON-WSA LANDS WITH WILDERNESS CHARACTERISTICS (WC)**Goals and Objectives:**

BLM has identified non-WSA lands with wilderness characteristics for management consideration in this planning effort. Wilderness characteristics include the appearance of naturalness and outstanding opportunities for solitude or primitive and unconfined recreation (see Appendix K and Map 15 for more information).

Protect, preserve, and maintain wilderness characteristics of non-WSA lands with wilderness characteristics as appropriate, considering manageability and the context of competing resource demands. Manage these primitive lands and backcountry landscapes for their undeveloped character, and to provide opportunities for primitive recreational activities and experiences of solitude, as appropriate.

Management Decisions:**WC-1**

Manage 47,761 acres of non-WSA lands (see Map 16) to protect, preserve, and maintain wilderness characteristics by applying the following prescriptions:

- Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A). Applying a no surface occupancy stipulation for oil and gas leasing to non-WSA lands with wilderness characteristics, in combination with the no surface occupancy applied because of the Three Rivers Withdrawal, results in tracts of land which are physically inaccessible to oil and gas operations within the Fisher Towers, Mary Jane Canyon, and Beaver Creek areas. For this reason, portions of non-WSA lands with wilderness characteristics in these areas will be closed to oil and gas leasing.
- These areas will be managed to preclude other surface-disturbing activities (see Appendix A) including mineral material sales.
- Retain public lands in Federal ownership.
- Prohibit woodland harvest.
- Manage vehicle use as limited to designated roads.
- Designate as VRM Class II.
- Manage as avoidance areas for ROWs.

WC-2

Non-WSA lands to be managed for wilderness characteristics include: Beaver Creek (25,722 acres), Fisher Towers (5,540 acres within the Richardson Amphitheater), and Mary Jane Canyon (16,499 acres within the Richardson Amphitheater).

PALEONTOLOGY (PAL)

Goals and Objectives:

Protect paleontological resources from surface-disturbing activities. Promote the scientific, educational, and recreational uses of fossils.

Foster public awareness and appreciation of the MPA's paleontological heritage.

Promote and facilitate scientific investigation of fossil resources.

Management Decisions:

PAL-1

Vertebrate fossils may be collected only by qualified individuals under a permit issued by the BLM Utah State Office. Vertebrate fossils include bones, teeth, eggs, and other body parts of animals with backbones such as dinosaurs, fish, turtles, and mammals. Vertebrate fossils also include trace fossils, such as footprints, burrows, gizzard stones, and dung.

PAL-2

Fossils collected under a permit remain the property of the Federal government and must be placed in an approved repository (such as a museum or university) identified at the time of permit issuance.

PAL-3

Locate, evaluate, and protect significant paleontological resources. Provide for public visitation and education opportunities while simultaneously protecting and supporting the scientific and research value of paleontological resources in the MPA.

PAL-4

Recreational collectors may collect and retain reasonable amounts of common invertebrate and plant fossils for personal, non-commercial use. Surface disturbance must be negligible, and collectors may only use non-power hand tools.

PAL-5

Casting of vertebrate fossils, including dinosaur tracks, is prohibited unless allowed under a scientific/research permit issued by the BLM Utah State Office.

PAL-6

Lands identified for disposal will be evaluated to determine whether such actions would remove significant fossils (see Appendix I) from Federal ownership.

PAL-7

Recognize and protect paleontological resources identified as part of the Dinosaur Diamond National Prehistoric Byway.

PAL-8

Prohibit petrified wood gathering within the Colorado Riverway Special Recreation Management Area (SRMA) to protect these paleontological resources for future public enjoyment. Prohibit private petrified wood collection only near high visitation sites within the Labyrinth Rims/Gemini Bridges SRMA. Manage petrified wood gathering outside these two SRMAs to allow for private collection of petrified wood (43 CFR 3620).

PAL-9

Prohibit commercial sales of petrified wood products due to limited availability of such resources.

PAL-10

Attach lease notices, stipulations, and other requirements to permitted activities to prevent damage to paleontological resources.

PAL-11

Manage Mill Canyon Dinosaur Trail, Copper Ridge Sauropod Trackway, and Poison Spider Track Site as important scientific and public education resources as guided by future SRMA activity-level plans.

PAL-12

Personal collection of a reasonable amount of invertebrate and plant fossils will be allowed throughout the MPA. Where areas with rare and significant invertebrate and plant fossils are identified, these areas will be closed to personal collection.

RECREATION (REC)**Goals and Objectives:**

To provide for multiple recreational uses of the public lands and sustain a wide-range of recreation opportunities and potential experiences for visitors and residents, while supporting local economic stability and sustaining the recreation resource base and sensitive resource values.

Management Decisions:**REC-1**

Management of recreation will be generally guided by the Utah Standards for Public Land Health and Guidelines for Recreation Management. The guidelines describe in a broad sense the conditions to be maintained or achieved for rangeland health within the recreation program.

REC-2

Where unacceptable damage to natural or cultural resources by recreational use is anticipated or observed, BLM will seek to limit or control activities by managing the nature and extent of the activity or by providing site improvements that make the activity more sustainable or by a combination of management controls and facility development. Such management actions will seek to reduce or eliminate the adverse impact while maintaining the economic benefits associated with a wide range of recreation uses.

REC-3

BLM will consider and, where appropriate, implement management methods to protect riparian resources, special status species, and wildlife habitat while enhancing recreation opportunities. Management methods may include limitation of visitor numbers, camping and travel controls, implementation of fees, alteration of when use takes place, and other similar actions to be approved through normal BLM procedures.

REC-4

BLM will coordinate management of recreation use with other agencies, State and local government and tribal units to provide public benefits.

REC-5

Recreational off-highway vehicle (OHV) and mechanized travel will be consistent with area and route designations described in the travel management plan. BLM will work with agency and government officials and permit holders to develop procedures, protocols, permits or other types of authorization, as appropriate, to provide reasonable access for non-recreational use of OHVs for military, search and rescue, emergency, administrative, and permitted uses.

REC-6

Dispersed camping is allowed where not specifically restricted. Dispersed camping may be closed seasonally or as impacts or environmental conditions warrant. All vehicle use associated with dispersed camping activities is required to stay on designated routes.

REC-7

Management actions limiting camping, wood gathering, firewood cutting, and requiring use of fire pans and portable toilets implemented through published closures limitations, restrictions, or special rules applicable to specific land areas within the MPA are carried forward in all alternatives (see Moab Field Office Recreation Rules in Appendix L).

REC-8

Lands acquired within a management area through future land tenure adjustment will take on the management of the surrounding area.

REC-9

Provide visitor information and outreach programs that emphasize the value of public land resources and low impact recreation techniques while also providing information about recreation activities, experiences and benefits.

REC-10

Provide public information concerning the prevention of the spread of invasive and exotic weeds, and about wildlife species and their habitat especially in riparian areas.

REC-11

Continue to manage the Slickrock Bike Trail and Fisher Towers Trail as a National Recreation Trails consistent with their current secretarial designation. National Trails designation will be consistent with this plan.

REC-12

Continue supporting public use and enjoyment of the Prehistoric Highway National Scenic Byway. Assist with the development and implementation of a management plan.

REC-13

Support Grand County's efforts to obtain approval of corridor management plans for Utah Scenic Byways (Utah Highways 128, 313, and 279) and provide assistance, where feasible, in the development of byway facilities consistent with other decisions of the RMP.

REC-14

Continue to manage Kane Creek Road to Hurrah Pass and the roads to Needles, Anticline, and Minor overlooks as Utah Scenic Backways.

REC-15

BLM Back Country Byways and National Recreation Trails may be designated in the future as deemed appropriate with site-specific environmental analysis.

REC-16

Continue managing Kokopelli's Trail to facilitate its use as a potential segment of the American Discovery Trail. Seek to acquire public access along the entire route to facilitate potential designation as a National Recreation Trail.

REC-17

Criteria for establishment of SRMAs, or adding or revising SRMA boundaries (using the Plan Amendment process, where appropriate) include:

- Recreation use requires intensive management strategies to provide recreation opportunities or maintain resource values.
- A recreation area management plan or interdisciplinary plan with intensive and specific recreation management actions is approved.
- BLM announces the management plan and plan approval through media.

See Map 17 and Appendix M for SRMA goals, settings, outcomes and management prescriptions.

REC-18

Generally, where SRMA boundaries are revised, management actions applicable to the original SRMA will also apply to the revised area.

REC-19

Manage all public lands within SRMAs for retention in Federal ownership consistent with the MFO exchange criteria and acquire high value non-Federal lands from willing sellers where such acquisition will further the purposes of each SRMA.

REC-20

Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A) within 0.5 miles of developed recreation sites (current and planned as Potential Future Facilities; see each SRMA).

REC-21

Manage all SRMAs for sustainable camping opportunities. Camping may be restricted to designated sites if use and conditions warrant.

REC-22

Manage all SRMAs according to the Visual Resource Management Class to protect scenic values and settings important to recreation.

REC-23

Approved recreation facilities supporting recreation area management objectives will be planned and designed to reduce visual impacts where feasible (see Visual Resource Management).

REC-24

Replace The Colorado River SRMA (24,124 acres) with the Two Rivers, Colorado Riverway and Dolores River Canyons SRMAs (Map 17) to provide for more focused management.

REC-25

Provide general recreation management guidance and subsequent implementation of management actions for activity plan level actions for SRMAs through continuation and

modification of approved recreation area management plans (RAMPs) and development of new RAMPs for all SRMAs.

REC-26

A River Management Plan for the Colorado River from the Colorado State Line to Castle Creek, and for the Dolores River, will be completed.

REC-27

Designate SRMAs as either Destination SRMAs (majority of visitation from outside the area), Community SRMAs (the majority of visitation is from the local community), or Undeveloped SRMAs (the focus of the SRMA is to maintain the backcountry setting).

REC-28

Facilities: Build and maintain additional recreation facilities consistent with the guidance provided in RAMPs and in the various Focus Areas as established in the RMP (Map 18). In the absence of a RAMP, facilities may be considered through the NEPA process where they support the objectives of the SRMA.

REC-29

Facilities: Campground facilities may be constructed; however, they will be located to avoid wetland, riparian, cultural resources, floodplains, and special status plant and animal species habitats. If avoidance is not possible, mitigation will be implemented to augment the values affected by the construction.

REC-30

Facilities: Continue to manage and maintain for recreation use all existing developed recreation sites. Follow site management guidance contained in RAMPs.

REC-31

Facilities: Continue existing ROWs issued to BLM for all existing developed recreation sites and facilities. Issue similar protective ROWs for all new recreation facilities.

REC-32

Facilities: Manage developed sites as necessary under the authority of 43 CFR Part 8360, inclusive of published closures, restrictions, and supplemental rules developed for the public lands within the MPA (see above), to protect visitor health and safety, reduce visitor conflicts, and provide for the protection of government property and resources.

REC-33

Focus Areas are Recreation Management Zones (RMZ) for emphasizing particular types of recreation activities while still allowing for other uses in accordance with the Travel Plan. As RMZs, Focus Areas (Map 18) are established as a mechanism for enhancing specific recreation opportunities through facilities and education such as route marking, parking, camping, and information. Where a single focus SRMA or a specific RMZ (Focus Area) is not identified, the default focus of that area is motorized, backcountry touring on designated roads. The roads are those identified in the Travel Plan accompanying this RMP.

REC-34

The types of Focus Areas are: Non-mechanized Recreation, Mountain Bike Backcountry Touring, Motorized Backcountry Touring, Scenic Driving Corridors, Specialized Sport Venue Non-motorized, Specialized Sport Venue Motorized, and Managed Open OHV Area.

REC-35

Cameo Cliffs SRMA: Manage the Cameo Cliffs area as a Destination SRMA (15,597 acres) under the Cameo Cliffs Recreation Area Management Plan. The Cameo Cliffs SRMA will provide sustainable opportunities for road-related motorized and mechanized outdoor recreation on a marked route system, and provide a non-mechanized hiking and equestrian area in Hook and Ladder Gulch and along the route of the Old Spanish Trail, while protecting and maintaining resource values including range, wildlife habitat, scenic, cultural, historical, recreational, and riparian values in current or improved condition. To facilitate use of the area for touring purposes, no motorized competitive events will be authorized.

Work with San Juan County to further implement the Cameo Cliffs portion of the San Juan County All-terrain Vehicle Plan, and to protect and manage wildlife, vegetation, and cultural resources.

Implement camping management rules as use levels and resource impacts warrant.

Facilities: Install Cameo Cliffs OHV Trailhead toilet.

REC-36

Canyon Rims SRMA: Manage the Canyon Rims SRMA (101,531 acres) as a Destination SRMA to protect, manage and improve the natural resources of the area while allowing for recreation activities such as developed camping, visiting scenic overlooks, auto touring on the primary road system, touring the secondary road system by motorized vehicle and mountain bike, and hiking and backpacking the canyons (in accordance with the ROS classes) utilizing interpretive and educational opportunities to realize the potential of the area. Major management actions in the Canyon Rims SRMA include:

- Manage the area as open to mineral leasing with controlled surface occupancy except for developed recreation sites, which will be managed as open to leasing with no surface occupancy.
- Manage the area to maintain ROS classes as inventoried.
- Acquire or exchange private and State lands from willing landowners.
- Manage the entire area as OHV travel limited to designated roads.
- Manage the western rim land areas of Hatch Point as VRM Class II and the remainder of the area as VRM Class III.
- Maintain and/or improve all existing developed recreation sites as specified in the Canyon Rims Recreation Area Management Plan.
- Restrict camping near developed recreation sites.
- Close the entire recreation area to wood cutting and gathering.
- Manage Hatch Wash and the lower section of West Coyote Creek for primitive, non-motorized recreation.

- Restrict backcountry motorized events to commercial and non-race special events on the Flat Iron Mesa Jeep Safari route only.
- Manage the Windwhistle Nature Trail, Anticline Overlook Trail, Needles Overlook Trail, and Trough Spring Canyon Trail for hiking use only
- Consider development of additional trails and recreation facilities only as necessary.

Focus Area -- Non-mechanized Recreation (3,642 acres): Hatch Wash Hiking and Backpacking Focus Area inclusive of the area from Goodman Canyon to the confluence of Hatch Wash with Kane Creek Canyon including the lower section of West Coyote Creek (from private land west to confluence with Hatch Wash) and the lower section of Troutwater Canyon.

- New motorized routes will not be considered in the Hatch Wash Hiking and Backpacking Focus Area.

Focus Area -- Scenic Driving Corridors: Needles and Anticline Roads – Utah Scenic Backways. Manage for scenic driving enjoyment. The corridor is defined as having a width of 1/2 mile from centerline (or to border of adjoining Focus Area).

REC-37

Colorado Riverway SRMA will be established as a Destination SRMA at 89,936 acres. Management will be the same as the Colorado Riverway Recreation Management Area which was established in 1992 and extended in 2001. Management has focused upon providing improvements to sites to facilitate recreation use and protection of scenic and other resource values. Subsequent recreation plan amendments have addressed camping in the Onion Creek area, the construction of a bike lane along SR-128 from the Porcupine Rim Trail to Lion's Park, the construction of a non-motorized bridge on non-Federal land at Lion's Park, and the establishment of a non-mechanized route system in the area between Onion and Professor Creeks. Major management actions in the Colorado Riverway SRMA include:

- Expand the boundary of the Colorado Riverway SRMA to include the lands north of the Entrada Bluffs Road to the boundary of the Two Rivers SRMA, as well as lands south of the Entrada Bluffs Road (one mile corridor).
- Manage the Colorado Riverway as a Destination SRMA to manage camping, boating, river access, trail, and interpretive facilities in popular areas along or near the Colorado River and to protect the outstanding resource values of the area. Guidance for management is included in the Colorado Riverway Recreation Area Management Plan.
- Manage the Dewey Bridge to Castle Creek portion of the Colorado River to provide opportunities for high use boating in a scenic setting (see Boating Management below).
- Manage south shore recreation sites (from Dewey Bridge to Lion's Park) under the Colorado Riverway RAMP.
- Manage the north shore to provide quality undeveloped designated camping and hiking opportunities while assuring protection of high quality habitat for bighorn sheep as well as for other resource values.
- Manage the Kane Creek Crossing area to emphasize responsible designated camping and scenic touring.
- Manage the Entrada Bluffs Road area to emphasize designated camping opportunities, and scenic touring.

- Manage the Shafer Basin addition to emphasize scenic backcountry driving opportunities (no camping allowed in this area).
- Manage the Amphitheater Loop, Fisher Towers, Negro Bill Canyon, Hunter Canyon, and Corona Arch trails and Professor Creek to provide high quality hiking-only opportunities while preserving ecological resources.
- Provide for parking and manage the Kings Bench route (above the Kane Creek Road near the Kings Bottom camping area) as a hiking route. Obtain public access from a willing seller across the short section of private land that is located along the route.
- Manage the seldom-used 1.5-mile long route (that spurs left from the Poison Spider Mesa Road) on the intermediate bench between the Colorado River and Poison Spider Mesa for hiking use. If future use levels warrant, develop a return hiking trail loop on the river side of the road bed.
- Establish the proposed Pothole Arch and Rockstacker trails on Amasa Back (Kane Creek) as mountain bike routes. Work with Monticello Field Office to designate the Jackson's Ladder historic horse trail as a mountain bike trail from Jackson's Hole to the Amasa Back Jeep Road. Work with private land owners to secure non-motorized access to the bottom of this route.
- Manage the Portal Trail to provide both hiking and mountain bike opportunities.
- Manage the Kane Creek Road to Amasa Back Jeep Road section of the Historic Jackson's Ladder trail as hiking and biking only.
- Acquire specific tracts of State land.
- Acquire private lands or scenic easements from willing sellers.
- Restrict motorized and mechanized travel to designated routes.
- Limit camping and camp fires to designated sites.
- Close the area to firewood cutting and limiting firewood gathering to riverside driftwood.
- Limit use of the Fisher Towers, Negro Bill Canyon, Hunter Canyon, and Corona Arch trails to foot travel.
- Lands along the Colorado River within the Riverway are withdrawn from mineral entry through the Three Rivers Withdrawal.

Future Facilities within the Colorado River SRMA:

- Castle Valley Interpretive Site.
- Entrada Bluffs Camping Area; camping in this area will be limited to this campground.
- Hittle Bottom Group Campsites.
- Kane Creek Crossing Camping Area. Work with SITLA to implement joint camping management in this area.
- Kane Creek Road Riverway Information Area
- Lower Castle Creek Trail Access.
- Poison Spider Dinosaur Track Trail.
- Utah Highway 128 Bike Lane.
- Utah Highway 279 Riverway Information Area.
- Wall Street climbing area toilet.

Focus Area -- Negro Bill Hiking and Ecological Study Focus Area: (8,684 acres) inclusive of Negro Bill Canyon between the Sand Flats Recreation Area and the Porcupine Rim Trail.

Manage for recreational mechanized use on the main portion of the Porcupine Rim Trail from the junction approximately 1.55 miles east of Little Spring (upper exit to Sand Flats Road) to Highway 128 (with the exception of the Porcupine Rim Trail to Coffeepot Rock which will be managed for motorized use.)

- Manage the Negro Bill Canyon Trail for hiking use only. Equestrian use of Negro Bill Canyon will be prohibited.
- Manage the Porcupine Rim Trail to provide only hiking and mountain biking opportunities. Management of this trail may change pending resolution of wilderness designation for the Negro Bill Canyon WSA.
- No new motorized routes will be considered.

Focus Area -- Richardson Amphitheater/Castle Rock, Hiking, Climbing and Equestrian

Focus Area: (24,767 acres) bounded by Fisher Valley, the rim of "Top of the World" escarpment, Highway 128, and non-Federal lands along the east side of the Castle Valley Road. Motorized use allowed on the Fisher Towers Road, the Onion Creek Road, roads serving private ranches and water developments in the Professor Valley area, and the motorized access route to the viewpoint of Professor Valley (the saddle between Adobe Mesa and Castle Rock) and the road to designated undeveloped campsites below Castle Rock. Work with Utah Open Lands (a private land conservation organization) to establish a semi-developed camping area to serve rock climbers.

- The Onion Creek Benches equestrian trail system between Onion and Professor Creeks will be managed to provide opportunities for equestrian trail riding. An equestrian-oriented reservable camping area will be managed in Onion Creek upstream from Highway 128. Up to 30 miles of equestrian trails will be marked within this Focus Area.
- Manage the Amphitheater Loop and Fisher Tower Trails for hiking only.
- Consider connecting hiking trails between Onion Creek and the Amphitheater Loop Trail.

Focus Areas -- Scenic Driving Corridors: These corridors include Highways 128 and 279 (which are both designated Utah Scenic Byways), as well as the Kane Creek/Hurrah Pass portion of the Lockhart Basin Scenic Backway and the BLM portion of the LaSal Mountain Loop Road Scenic Backway. Manage for scenic driving enjoyment. The corridor is defined as having a width of 1/2 mile from centerline, or line of sight or to border of adjoining Focus Area (whichever is shorter; see VRM for management prescriptions).

Focus Areas -- Specialized Sport Venue, Non-motorized: Tombstone Competitive BASE Jumping Focus Area (42 acres):

- Manage Tombstone area to provide BASE jumping opportunities along the Kane Creek Road. BASE jumping will not be allowed in developed recreation sites.

Focus Areas -- Specialized Sport Venue, Non-motorized Wall Street Sport Climbing Focus Area (44 acres) (with special protective measures taken for rock art):

- Manage Wall Street area to provide rock climbing opportunities along the Potash Road.

Boating Management: Dewey to Castle Creek: Manage to provide an opportunity for scenic, mild whitewater boating. No restrictions on amount of private use will be established unless unacceptable resource impacts occur. Permit 22 unallocated commercial permits. No further restrictions on amount of commercial use will be established.

- Camping will be restricted to designated campsites along the north side of the Colorado River and existing campgrounds on the south side of the Colorado River.

REC-38

Dolores River Canyons SRMA (Map 17):

- Manage as an undeveloped SRMA (31,661 acres)
- Maintain high quality opportunities for non-motorized boating and day hiking or backpacking in a remote setting supported by basic trailheads, trails, and car camping facilities that support primitive, non-motorized use of the canyon system.
- Major management actions will include prohibition of motorized and mechanized recreation use within the Dolores River's tributary canyons consistent with the Travel Plan.
- No new motorized routes will be considered.

Boating Management: Colorado State Line to Bridge Canyon: Manage to provide opportunities for scenic whitewater boating trips. Permits required for private and commercial use. Establish maximum group size of 25 (excluding guides on commercial trips). Do not establish daily launch limits. Permit 14 unallocated commercial outfitters.

REC-39

Labyrinth Rims/Gemini Bridges SRMA (Map 17):

- Manage the Labyrinth Rims/Gemini Bridges area (Map 17) as a Destination SRMA (300,650 acres)
- BLM manages private boating use in Labyrinth Canyon in conjunction with the Utah Divisions of State Parks and Recreation and Fire, Forestry and State Lands under the terms of a cooperative agreement. The agreement establishes an interagency river permit system and coordinates implementation of common river protection rules including group size and use of fire pans and portable toilets. BLM also issues permits for shoreline use related commercial river trips.
- Lands along the Green River in Labyrinth Canyon were withdrawn from new entry under the mining laws through the Three Rivers Withdrawal.
- Front country type use takes place along SR 313 and the Island in the Sky Road. This highway was designated the Dead Horse Mesa Scenic Byway by the State of Utah in the early 2000s. To manage dispersed camping and protect scenic values, BLM establishes a 1-mile-wide corridor along SR 313 and the Island in the Sky Entrance Road where camping is limited to designated sites, wood cutting and firewood gathering are prohibited, and portable toilets are required. BLM currently limits camping in the corridor to the Horsethief Campground, the Lone Mesa, and Cowboy Camp camping areas. BLM also limits camping and prohibits woodcutting and firewood gathering in a one- mile-wide corridor along the

Gemini Bridges Road. Manage the small Cowboy Camp for tent camping and manage the Lone Mesa area for group use.

- In addition to the Mineral Bottom Takeout, BLM manages several additional facilities in the area including the Mill Canyon Dinosaur Interpretive Trail, the Halfway Stage Station Interpretive Site, and the Copper Ridge Sauropod Trackway Interpretive site. BLM also manages and maintains route markings (with user group assistance) on the Monitor and Merrimac, Seven Mile Rim, Poison Spider Mesa, Golden Spike, Goldbar Rim, Gemini Bridges, Lower Monitor and Merrimac, Bar M, and Klondike Bluffs routes which are used by both motorized and non-motorized visitors. The 3-D, Crystal Geyser, Hellroaring Rim, Secret Spire, and Wipeout Hill routes are authorized for Jeep Safari and other uses.
- Continue issuing permits, for both private and commercial users, with common river protection rules for Labyrinth Rims/Gemini Bridges SRMA and consider extending the BLM/State cooperative agreement for management of non-commercial use to include management of commercial river use. If future use levels warrant, relocate the Mineral Bottom Takeout to a more suitable location and initiate cooperative site operations with the National Park Service.
- Limit camping to designated sites in high-use areas including the Scenic Driving Corridors and all areas east of the Dubinky Well Road as well as along Ten Mile Wash.
- Manage backcountry areas to facilitate scenic motorized touring on designated routes with special emphasis upon establishment of low-development, end of route parking areas and route signing.
- Improve the road to the Mill Canyon Dinosaur Trailhead to accommodate passenger car traffic.
- Consider development of an alternative single-track mountain bike route on Poison Spider Mesa across the mesa top to the top of the Portal Trail.

Future Facilities:

- Bartlett Campground: camping in this area will be restricted to this campground.
- Lone Mesa Campground: camping in this area will be restricted to this campground.
- Blue Hills Road OHV Trailhead.
- Courthouse Rock Campground, camping in this area will be restricted to the campground.
- Cowboy Camp Campground, camping in this area will be restricted to this campground.
- White Wash Sand Dunes OHV Parking and Camping Area.
- Gemini Bridges Parking Area and Trailhead.

Focus Area -- Scenic Driving Corridors: Highway 313 and the Island in the Sky Road (Utah Scenic Byway): Manage for scenic driving enjoyment. The corridor is defined as having a width of 1/2 mile from centerline (or to border of adjoining Focus Area; see Appendix A).

Focus Areas -- Non-Mechanized Recreation:

- Goldbar/Corona Arch Hiking Focus Area (4,191 acres) covers the lands below the Golden Spike OHV route inclusive of the Culvert Canyon drainage to the northern rim of Long Canyon exclusive of the main stem of the Day Point Road. Manage the Corona Arch Trail for hiking only. Develop a hiking loop route in Culvert Canyon from the canyon bottom up to Jeep Arch and back on the western bench of Culvert Canyon to the canyon to just up

canyon from the railroad spur. Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A) to protect primitive hiking opportunities and scenic values. No new motorized routes will be considered.

- Spring Canyon Hiking Focus Area (457 acres) will be established upstream from the Spring Canyon Bottom Road. No new motorized routes will be considered.
- Labyrinth Canyon Canoe Focus Area (7,709 acres) inclusive of the rims along the east side of Labyrinth Canyon from Placer Bottom to Mineral Bottom exclusive of the Hey Joe Mine OHV and mountain bike route. No new motorized routes will be considered.
- Seven Mile Canyons Equestrian Focus Area (1,026 acres) inclusive of the north and south forks of Seven Mile Canyon westward from the junction of the two canyons. Equestrian use in this area will be restricted to private (non-commercial) horse use. No new motorized routes will be considered.

Focus Areas -- Mountain Bike Backcountry Touring:

- Klondike Bluffs Mountain Biking Focus Area (14,626 acres) between Arches National Park and U.S. 191. Work with Grand County and SITLA to establish mountain-bike only opportunities in the Klondike area. Manage the Copper Ridge Sauropod Trackway Interpretive Trail for hiking only.
- Bar M Mountain Biking Focus Area (2,904 acres) between Arches National Park, U.S. Highway 191, and the Bar M area state lands, exclusive of motorized access for the Copper Ridge Jeep Safari Route and the 191 rock quarry access road. Convert existing routes to mechanized use and provide for a limited number of new and connecting routes to support use of area as the destination for the 191 bike lane. Recommend that the old highway route in Moab Canyon be managed for non-motorized use to facilitate use of the route as part of the 191 bike lane.
- Tusher Slickrock Mountain Biking Focus Area (428 acres) on slickrock between Bartlett and Tusher Washes with main access from Bartlett Wash to reduce traffic in Tusher Canyon. Manage the Tusher Canyon slickrock and Bartlett slickrock areas for mountain bike and hiking use only. Cross-country mountain biking across slick rock will be allowed throughout this area.
- Mill Canyon/Upper Courthouse Mountain Biking Focus Area (5,744 acres) inclusive of areas within the Mill Canyon and upper Courthouse drainages with continued use of the Seven Mile Rim Jeep Safari route for motorized use, with non-motorized trailheads near the Mill Canyon Dinosaur Trail and the Halfway Stage Station. Manage the Mill Canyon Dinosaur Trail for hiking only (35 miles of road designated for motorized travel; 23 miles of route managed for mechanized use only).

Focus Area -- Motorized Backcountry Touring:

- Gemini Bridges/Poison Spider Mesa Focus Area (16,299 acres) for multiple use, including full-size OHV, ATV, and motorcycle use with consideration given to managing routes suitable for each vehicle type. Travel will be intensively managed on designated routes only. Close the spur route to Gemini Bridges to facilitate public use and help restore damaged lands along the spur route. Construct a parking area near the bridges.

Focus Areas -- Specialized Sport Venue (Non-motorized):

- Mineral Canyon/Horsethief Point Competitive BASE Jumping Focus Area (762 acres) is established.
- Bartlett Slickrock Freeride Focus Area (166 acres) is established. No man-made structures will be added to facilitate "stunt riding."

Focus Areas – Specialized Sport Venue (Motorized):

- Dee Pass Motorized Trail Focus Area (35,290 acres) for motorcycle and ATV use: This is the area for competitive motorized events. Competitive routes within this area will be identified based on site-specific NEPA analysis. All routes designated for motorized use in the accompanying Travel Plan will remain open while Section 106 cultural resource inventories are conducted. If these inventories indicate the presence of eligible sites within the travel corridor, the route will be altered or closed. All new routes will require Section 106 cultural resource inventory prior to designation. Establish a managed OHV route system with provision for ongoing management of existing single-track routes to maintain their single-track character.
- Airport Hills Motocross Focus Area (285 acres): Manage the Focus Area for motocross use in partnership with local government under the Recreation and Public Purposes Act. A patent will be issued to local government.

Focus Area – Managed OHV area (cross country travel allowed):

- White Wash Sand Dunes Open OHV Focus Area, (1,866 acres) encompassing the area around the dunes themselves. Manage the central portion of the White Wash Sand Dunes for motorized sand play with exception of the dune field cottonwood trees and White Wash water sources which will be closed to motorized travel and fenced.
- Limit camping use in the White Wash Sand Dunes area to designated sites and establish basic camping facilities on the bench on the north side of White Wash.
- Implement a fee system, under the guidelines of the Federal Land Recreation Enhancement Act, to help fund cost of intensive management of the White Wash Sand Dunes area.

REC-40

Lower Gray Canyon SRMA (Map17):

- Manage as a Destination SRMA in coordination with the Price Field Office.
- Manage river recreation in accordance with the Desolation-Gray Canyons Management Plan.
- Manage the existing riverside and the parallel bench route loop trails from Nefertiti Rapid to Rattlesnake Canyon for hiking and equestrian use.
- Vehicle camping limited to designated sites

REC-41

Sand Flats Area SRMA (Map 17):

- Manage as a Destination SRMA (6,246 acres). Guidance for management is included in the Sand Flats RAMP, which was approved in August of 1994, and is supported by the June 1994 Cooperative Agreement with Grand County, which authorizes the county to collect fees for the benefit of the recreation area and participate in the operational management of the area to help implement the recreation area management plan. The following decisions are carried forward from these plans:
 - ♦ Acquisition of State lands through exchange.
 - ♦ Provision for entrance and use fees.
 - ♦ Development of campgrounds.
 - ♦ Potential development of a drinking water source.
 - ♦ Provision for parking lots at the Slickrock and Little Spring trailheads.
 - ♦ Installation of toilets.
 - ♦ Development of an entrance station.
 - ♦ Provision for visitor protection.
 - ♦ Information and various services.
 - ♦ Limit camping to designated sites.
 - ♦ Limit OHV and mountain bike travel to designated routes.
 - ♦ Prohibit wood collecting and gathering.
 - ♦ Close the Moab Slickrock Bike Trail to four-wheeled vehicles and ATV use for safety purposes.
 - ♦ The Slickrock Bike Trail is open to motorcycles and mountain bikes only.
 - ♦ Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A) to protect recreation and scenic values.

REC-42

South Moab SRMA (Map 17):

- Manage the South Moab SRMA (Map 17) as a Destination SRMA (63,999 acres).
- Provide emphasis upon development of non-motorized trails through agreements with neighboring land owners through preparation of management guidance covering the Ken's Lake area.
- Work with Grand and San Juan counties to establish the New Spanish Trail Bicycle Lane to provide safe bicycle access from Canyonlands Field to the Pack Creek Picnic Area.
- Work with Moab City and Grand County to extend the Mill Creek Parkway to the Power Dam trailhead to provide safe access for cyclists and hikers.
- Formalize and continue the existing partnership with the water district to share management expenses at Ken's Lake.
- Manage the Mill Creek Power Dam hiking trailhead, the Ken's Lake Recreation Site, the Hidden Valley hiking trailhead and the Blue Hill multi-use trailhead as recreation sites. Continue to manage the Mill Creek Canyon hiking trails, the Ken's Lake hiking trail system, the Hidden Valley Hiking trail, the Steelbender/Flat Pass OHV/ mountain bike route, the Behind the Rocks OHV route, the Strike Ravine OHV route, and the Kane Creek Canyon Rim OHV/mountain bike route as recreation routes.

- Limit camping to designated sites and prohibit wood gathering and cutting along the Black Ridge Road, the Pack Creek Road, the LaSal Mountain Loop Road and the Kane Creek Canyon Rim Road out to the Picture Frame Arch area. Prohibit camping on the west side of Spanish Valley, and in Mill Creek.
- Manage Ken's Lake as a developed recreation site in partnership with the holders of the ROW for Ken's Lake (Spanish Valley Water and Sewer District).
- Manage the Mill Creek Canyon planning area in accordance with the approved interdisciplinary Mill Creek Canyon Management Plan.
- Work with Grand County, SITLA, and private land owners to establish the "Power line" trail along the west side of Moab and Spanish Valleys from Kane Creek Road near the river portal south via the Hidden Valley Trailhead to the southern end of the Behind the Rocks area.
- Work with San Juan and Grand Counties, SITLA, and private land owners to establish the Red Rock Horse Trail along the east side of Spanish Valley via Ken's Lake from the Johnson's Up-on-Top Road to the Loop Road/Pack Creek junction area.
- Work with the Backcountry Horsemen, SITLA and San Juan County to establish equestrian riding loop routes south from the Ken's Lake Trailhead.

Focus Area -- Scenic Driving Corridors:

- LaSal Mountain Loop Road Scenic Backway. Manage for scenic driving enjoyment. The corridor is defined as: having a width of 1/2 mile from centerline (or to border of adjoining Focus Area) (see Appendix A).

Focus Areas -- Non-mechanized Recreation:

- Mill Creek Canyon Hiking Focus Area (16,950 acres) inclusive of the north and south forks of Mill Creek, Rill Creek, and Burkholder Draw south to the LaSal Mountain Loop Road with motorized use limited to the Steelbender OHV route and routes identified in the Travel Plan for this alternative. Emphasize management of the core area of Mill Creek to provide primitive hiking opportunities. Commercial equestrian use of Mill Creek Canyon and its tributaries will be prohibited except for use along the Steelbender/Flat Pass OHV/mountain bike route. No new motorized routes will be considered.
- Behind the Rocks Hiking Focus Area (17,536 acres) inclusive of the area currently closed to motorized use in the 1985 RMP and the Hunter Canyon area between Pritchett Canyon and the eastern rim of Kane Creek Canyon exclusive of the Pritchett Canyon and Behind the Rocks OHV route. Manage the Hunter Canyon trail for hiking only. Emphasize management of the core area of Behind the Rocks to provide primitive hiking opportunities. No new motorized routes will be considered.

Focus Area -- Mountain Bike Backcountry Touring:

- Upper Spanish Valley Mountain Biking Focus Area (2,255 acres; Mud Spring Area) for development of a beginner to intermediate skill level mountain bike trail system through conversion of existing routes and development of new routes. Work with SITLA to expand route system on adjacent state lands.

Focus Area -- Specialized Sport Venue (Non-motorized):

- 24 Hours of Moab Focus Area (2,905 acres) will be established to facilitate mountain bike speed-related events.

Focus Area -- Specialized Sport Venue (Motorized):

- Potato Salad Hill Climbing Focus Area (41 acres) will be established within the boundary of the fenced areas emphasizing hill climbing events. Parking limitations will be established to limit vehicle group size.

REC-43

Two Rivers SRMA (Map 17):

- Manage the Two Rivers SRMA (29,839 acres) as a Destination SRMA with the objective of continuing to provide distinct, high quality opportunities for recreational boating and camping, and to protect the outstanding resource values. Use launch systems and campsite assignments to reduce inter-party contacts.

Boating Management -- State Line to Westwater Ranger Station: Manage for relatively high use flat water boating in conjunction with the Ruby/Horsethief Canyons section in Colorado. Co-administer a private boating or parking permit system and user limitations and fees in conjunction with Colorado BLM as a means of providing for adequate take-out.

Boating Management -- Westwater Canyon: Manage to provide an opportunity for whitewater boating in a primitive and remote setting. Permits required for private and commercial use. Distribute potential use levels equally from May 1 to September 30 (allocation season) between private and commercial sectors (including guides). Establish maximum private group size of 25 people and a daily launch limit of 75 people. For commercial use, establish a maximum trip size of 25 passengers, plus one crew member per passenger carrying craft, plus two additional crew. Establish a commercial daily launch limit of 75 passengers. Permit 18 commercial outfitters.

Boating Management -- Cisco Landing to Dewey Bridge: Manage to provide an opportunity for scenic flat water boating or as an extension of Westwater Canyon trips. For private use, no restrictions on amount of use will be established. Permit 22 unallocated commercial permits. No further restrictions on amount of commercial use will be established. Manage the Dewey Bridge Recreation Site under the Colorado Riverway RAMP.

Boating Management -- Dolores River from Bridge Canyon to its confluence with the Colorado River: Manage to provide opportunity for scenic whitewater boating trips. Permits required for private and commercial use. Establish maximum group size of 25 (excluding guides on commercial trips). Do not establish daily launch limits. Permit 14 unallocated commercial outfitters.

Future Facilities: Acquire additional lands at the Westwater Ranger Station to include additional camping, parking and launch facilities. Seek to develop a take-out facility separate

from the Westwater Ranger Station launch ramp to reduce congestion at the ranger station. Seek opportunities to expand legal and physical access to facilitate camping at the Ranger Station.

Focus Area -- Non-mechanized Recreation:

- Establish the Westwater Canyon River Use and Hiking Focus Area (23,479 acres) inclusive of Westwater Canyon along the Colorado River between Westwater Ranch and Rose Ranch and the surrounding uplands.
- New motorized routes will not be considered.

REC-44

Utah Rims SRMA (Map 17):

Manage Utah Rims as a Community SRMA (15,424 acres) to provide sustainable opportunities for motorized, mechanized and non-motorized route related recreation while protecting and maintaining resource values including range, wildlife habitat, scenic, cultural, recreational, and riparian values in current or improved condition. Work with Colorado BLM to coordinate management of the Utah Rims and Rabbit Valley Colorado areas. Management actions will include:

- Manage the Kokopelli's Trail for recreation use.
- Manage Bitter Creek Campsite for camping.
- Limit motorized and mechanized travel to a designated road and route system, including where feasible, the establishment and management of a network of single-track routes.
- Acquisition of public access across non-Federal lands for the route system.
- Development of a staging area.
- Potential separation of types of single-track route use by time period.
- Limited provision of camping facilities.
- Prohibition of competitive, motorized events on the single-track route system to maintain its single-track nature.
- Add single-track routes to the route system on a case-by-case basis pending resolution of resource concerns.

REC-45

Extensive Recreation Management Area: Manage all lands within the MPA not within an SRMA as the Moab Extensive Recreation Management Area (ERMA; see Map 17 and Appendix M).

ERMA lands may be designated as SRMAs in the future based on intensity of use and will be analyzed through the plan amendment process.

Minimal facilities may be constructed in the ERMA as needed to insure visitor health and safety, reduce user conflict, and protect resources.

Provide general recreation management guidance and subsequent implementation of management actions for activity plan level actions for the Moab ERMA through development of

a Recreation Area Management Plan (RAMP). Address both site-related issues (development and management in response to user demand and changing conditions) and backcountry management issues (the retention of backcountry characteristics, e.g., low level of development, relative lack of crowding, and feeling of remoteness).

Amend the RMP, as necessary, for RMP level recreation and non-recreation actions proposed through the RAMP developed subsequent to RMP approval.

Manage OHV travel as limited to designated routes or closed, depending on the specific area (see Travel Management section, beginning on page 2-47).

Monitor recreation activity in the Moab ERMA to maintain recreation opportunities and protect resource values.

Continue making improvements to sites and areas as necessary and supported by activity and project level planning to balance demand for recreation opportunities and protection of the recreation resource base.

Continue to manage the Utah portion of the Kokopelli's Trail as a multi-day mountain bike and vehicle route (in part) with associated camping areas.

Develop basic camping and trailhead facilities to serve the Lost Spring Canyon area should use levels and impacts warrant.

Construct information boards at the main exits along I-70 to inform visitors about recreation opportunities, travel management, low impact recreation techniques, and visitor safety issues.

Upper Fisher Mesa (1,365 acres) will be managed to emphasize mountain biking. BLM will convert existing roads and provide new connecting routes for bicycle use in conjunction with the existing bike route within the Manti-LaSal National Forest. Motorized access will be retained along the main existing Fisher Mesa access road.

Manage the Bookcliffs area (335,457 acres) for non-mechanized recreation, especially equestrian use, hiking, backpacking and big game hunting. It will be managed for low frequency of visitor interaction by not establishing new motorized or mechanized recreation routes, no commercial motorized permits will be issued, and competitive events will not be allowed.

Manage the Sego Canyon Rock Art Site as a day use recreation area. Consider acquisition of the adjacent private rock art area north of the interpretive site to expand interpretive opportunities.

REC-46

Special Recreation Permits (SRPs): SRPs are issued as a discretionary action as a means to: help meet management objectives, provide opportunities for economic activity, facilitate recreational use of the public lands, control visitor use, protect recreational and natural resources, and provide for the health and safety of visitors. Cost recovery procedures for issuing SRPs will be applied where appropriate.

REC-47

Priority for authorization of new SRPs for events are given to applicants proposing uses that: do not duplicate existing events; take place outside of March, April, May, and October; make use of less-crowded weekdays; utilize facilities off public lands for overnight accommodation of guests; display and communicate the Canyon Country Minimum Impact Practices; and focus visitation on sites and areas capable of withstanding repeated use.

REC-48

All SRPs will contain standard stipulations appropriate for the type of activity and may include additional stipulations necessary to protect lands or resources, reduce user conflicts, or minimize health and safety concerns.

REC-49

There will be no competitive mechanized or motorized events in Wilderness Study Areas while these areas are managed under the IMP.

REC-50

Issue and manage special recreation permits for a wide variety of uses to enhance outdoor recreational opportunities, provide opportunities for private enterprise, manage user-group interaction, and limit the impacts of such uses upon natural and cultural resources. Organized group permits required for groups with 25 or more vehicles (one driver/vehicle).

RIPARIAN (RIP)

Goals and Objectives:

Manage riparian areas for properly functioning condition (PFC) and ensure stream channel morphology and functions are appropriate for local soil type, climate, and landform.

Avoid or minimize the disturbance, loss, or degradation of riparian, wetland, and associated floodplains; preserve and enhance natural and beneficial values; and provide for fish, wildlife and special status species habitats.

Management Decisions:

RIP-1

Manage riparian resources for PFC, which is described as the presence of adequate vegetation, landforms, or large woody debris, in accordance with the Utah Standards for Public Rangeland Health and Guidelines for Recreation Management for BLM Lands in Utah and with the Grazing Guidelines for Grazing Management.

RIP-2

Retain the Between the Creeks, North Sand Flats, and South Sand Flats Allotments as not available for grazing to benefit riparian resources. These allotments include the following streams: Negro Bill Canyon, portions of Mill Creek, and Rill Creek.

RIP-3

Mitigation to reduce impacts to floodplains and riparian areas include (from Standards for Public Land Health and Guidelines for Recreation Management for BLM Lands in Utah and BLM Riparian Manual 1737):

- Where feasible and consistent with user safety, developed travel routes will be located/relocated away from sensitive riparian/wetland areas.
- Camping in riparian areas will be avoided and must be managed, monitored, and modified as conditions dictate to reduce vegetation disturbance and sedimentation.
- Stream crossings will be limited in number dictated by the topography, geology, and soil type. Design any necessary stream crossings to minimize sedimentation, soil erosion and compaction (minimize longitudinal routes along stream banks, design crossings perpendicular to the stream).
- Where necessary, control recreational use by changing location or kind of activity, season, intensity, distribution and/or duration.
- Grazing actions to meet riparian objectives include vegetation use limits, fencing, herding, change of livestock class, temporary closures, change of season, and/or alternate development or relocation of water sources.
- Any water diversions from riparian areas by BLM or non-BLM entities will be designed and constructed to protect ecological processes and functions.
- Implement weed management stipulations and education to reduce spread of noxious weeds along stream corridors.

RIP-4

To the extent possible, mineral removal and lease development (including placer mining) must be located away from water's edge and outside of riparian/wetland zones.

RIP-5

Limit activities in riparian areas, as necessary, to achieve and maintain PFC.

RIP-6

Grazing actions to meet riparian objectives can include fencing, herding, change of livestock class, temporary closures, and/or change of livestock season of use.

RIP-7

Preclude surface-disturbing activities within 100-year floodplains and within 100 meters of riparian areas, public water reserves, and springs.

RIP-8

Prioritize restoration activities in riparian systems that are Functioning at Risk or Non-functioning.

RIP-9

Continue to apply integrated species management to accomplish riparian restoration through biological, chemical, mechanical, and manual methods (e.g., tamarisk control, willow plantings).

RIP-10

Acquire riparian lands and water resources (from willing sellers) to preserve and maintain riparian habitat and instream flow.

RIP-11

Do not dispose of riparian or wetland resources unless resource loss is mitigated.

RIP-12

Develop watershed management plans for impaired systems as identified in current TMDL reports (e.g., Onion Creek, Mill Creek, and Castle Creek).

RIP-13

Close riparian areas to woodcutting, except where permitted for traditional cultural practices identified for Native Americans or for restoration to benefit riparian values.

RIP-14

Establish Lower South Fork of Seven Mile Canyon as a Riparian/Wetland Demonstration Area for the improvement and restoration of riparian, wetland and wildlife resources.

RIP-15

Grazing will not be authorized on portions of the following streams (listed with affected allotments): the Colorado River from Dewey Bridge to Hittle Bottom (Professor Valley), and Lower Kane Creek (Kane Creek Springs).

RIP-16

Management strategies will be implemented to restore degraded riparian communities, protect natural flow requirements, protect water quality, and manage for year-round flow.

RIP-17

Grazing Actions: Evaluate non-functioning and functioning at risk riparian areas using Standards for Rangeland Health and Guidelines for Livestock Grazing Management to determine if restriction from grazing will improve riparian functioning condition. The following riparian areas will be given priority for evaluation: Ten Mile from Dripping Spring to the Green River, Mill Creek, Seven Mile Canyon, and East Coyote (totaling 1,420 acres).

RIP-18

Grazing Actions: Cottonwood, Bogart, Pear Park and Diamond Allotments (which include Cottonwood and Diamond Canyons) will continue to be not available to grazing to benefit riparian resources. Castle Valley will also not be available for grazing. Spring Creek will be available for grazing.

RIP-19

Season-of-Use: Season of use adjustments will be made on a case-by-case basis to achieve PFC.

RIP-20

Watershed Management Plans: Prioritize development and implementation of the Watershed Management Plans and riparian studies for the following areas: Ten Mile Wash, Kane Springs, Bartlett Wash, Tusher Wash, Mill Canyon, Courthouse Wash, Cottonwood-Diamond, and Onion Creek.

SOIL AND WATER (SOL-WAT)

Goals and Objectives:

Manage watersheds to enhance ecosystem health and provide for public uses.

Maintain and improve existing water quality by ensuring that all authorized uses on public lands comply with State water quality standards and with the Colorado River Basin Salinity Control Act.

Manage watersheds to maintain or improve soil quality and long-term productivity.

Management Decisions:

SOL-WAT-1

Comply with all State, Federal and local laws to protect municipal watersheds (Thompson, Moab, and Castle Valley), and watersheds of any public or private water supply such as Windwhistle Campground, Westwater Ranger Station, La Sal Creek, and Browns Hole.

SOL-WAT-2

Coordinate with Utah Division of Oil, Gas, and Mining to remediate existing Abandoned Mine Lands sites.

SOL-WAT-3

Comply with Floodplain Executive Order 11988.

SOL-WAT-4

BLM will work with partners to implement Best Management Practices (BMPs) and continue BLM's cooperative work with the Utah Divisions of Water Rights and Water Quality in accordance with the administrative memorandum of understanding (MOU) and the cooperative agreement addressing water quality monitoring.

SOL-WAT-5

Allow no surface occupancy and preclude surface-disturbing activities (see Appendix A) within 100-year floodplains, within 100 meters of a natural spring, or within public water reserves.

SOL-WAT-6

In cooperation with Grand and San Juan Counties, develop BMPs for road maintenance and construction in high risk areas (e.g., floodplains, riparian zones, and areas with sensitive soils).

SOL-WAT-7

Continue management of the Mill Creek planning area in accordance with the Mill Creek Management Plan (2001).

SOL-WAT-8

Develop watershed management plans for municipal watersheds to ensure water sources are protected adequately. Monitor municipal water quality/watershed conditions.

SOL-WAT-9

To protect sensitive soils on slopes, apply a timing limitation stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) prohibiting surface-disturbing activities on slopes in the Bookcliffs (see Map 19) greater than 30% from November 1 to April 30. This restriction includes road construction and traffic on existing roads associated with initial drilling operations. In addition, apply a controlled surface use stipulation for oil and gas and other surface-disturbing activities (see Appendix A) on slopes greater than 30% throughout the MPA.

SOL-WAT-10

Follow Total Maximum Daily Load (TMDL) recommendations on 303(d) listed streams, currently Mill, Castle, and Onion Creeks.

SOL-WAT-11

Minimize surface disturbance in areas identified as having "sensitive soils" unless long-term impacts can be mitigated.

SOL-WAT-12

Maintain vegetation based on desired future condition to provide adequate ground cover to prevent accelerated erosion in wind erodible soils.

SOL-WAT-13

Apply environmental BMPs to all oil and gas authorizations in accordance to WO IM 2007-021 and the most current version of the "Goldbook."

SOL-WAT-14

Develop BMPs to address health and safety concerns associated with blowing dust along U.S. 191 and I-70.

SOL-WAT-15

Maintain or improve soil quality and long-term soil productivity through the implementation of Standards for Rangeland Health and other soil protection measures.

SOL-WAT-16

Manage uses to minimize and mitigate damage to soils.

SOL-WAT-17

Maintain and/or restore overall watershed health and reduce erosion, stream sedimentation, and salinization of water.

SOL-WAT-18

Coordinate with Grand Water and Sewer Service Agency to ensure required minimum instream flow of 3.0 cfs in Mill Creek below the Sheley diversion.

SOL-WAT-19

Implement portions of Greater Sagers Wash Watershed Management Plan that pertain to surface disturbance.

SOL-WAT-20

No additional OHV routes will be allowed in saline soils other than those already designated in the Travel Plan accompanying this RMP (see Appendix N). An exception will be considered on a case-by-case basis for proposed routes in the Dee Pass Motorized Focus Area and in the Utah Rims SRMA. Exceptions could also be considered on a case-by-case basis outside these two areas if potential impacts could be mitigated and if the action will benefit other natural and cultural resources.

SOL-WAT-21

Develop BMPs for activities on saline and other sensitive soils.

SOL-WAT-22

Specific recommendations regarding surface and subsurface pipeline crossings found in Guidance for Pipeline Crossings (see Appendix O) will be implemented to prevent breakage and subsequent contamination.

SOL-WAT-23

Implement guidelines from Technical Reference 1730-2, where feasible, to protect or restore the functions of biological soil crusts.

SOL-WAT-24

Manage public lands in a manner consistent with the Colorado River Salinity Control Program, implementing BMPs and watershed restoration projects to reduce salinity contributions to the Colorado River system.

SOL-WAT-25

Aquifers/Watersheds: Apply a no surface occupancy stipulation to oil and gas leasing and preclude other surface-disturbing activities in the Castle Valley watershed in order to protect the sole source, unconfined, surficial aquifer.

SOL-WAT-26

Apply a no surface occupancy stipulation to oil and gas leasing and preclude other surface-disturbing activities in the Mill Creek-Spanish Valley watershed in order to protect the aquifer for the Moab area.

SOL-WAT-27

Saline Soils in Mancos Shale: To minimize watershed damage on saline soils in the Mancos Shale, apply a timing limitation stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) prohibiting surface-disturbing activities on 330,142 acres of moderately to highly saline soils in the Mancos Shale (see Map 20) from December 1 to May 31. This restriction includes road construction and traffic on existing roads associated with drilling operations

SOL-WAT-28

Grazing: Use grazing systems and develop AMPs to minimize impacts to saline Soils.

SOL-WAT-29

Watershed Management Plans: Prioritize development and implementation of the Watershed Management Plans for the following areas: Ten Mile Wash, Kane Springs, Bartlett Wash, Tusher Wash, Mill Canyon, Courthouse Wash, Cottonwood-Diamond, and Onion Creek.

SPECIAL DESIGNATION: AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

Goals and Objectives:

The term "Area of Critical Environmental Concern" means areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards (FLPMA, 43 U.S.C. 1702(a)).

Management Decisions:

ACEC-1

Designate, modify and manage areas as ACECs (see Map 21) where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. In those areas where ACECs overlap with WSAs, the WSA management prescriptions, as stipulated in the Interim Management Policy for Lands Under Wilderness Review (IMP), will take precedence.

ACEC-2

ACECs will be avoidance areas for all ROWs, including wind, solar energy and communication sites.

ACEC-3

Behind the Rocks (5,201 acres) will be designated as an ACEC. This area excludes the Behind the Rocks WSA, which will be managed according to the IMP to protect wilderness values.

Special Management: To protect the relevant and important values of natural systems (threatened, sensitive and endangered plants), cultural resources and scenery, the following management prescriptions will apply:

- Designate as VRM Class II.
- No vegetation treatments (except for exotic/noxious weeds).
- Cultural resources in Behind the Rocks ACEC will be prioritized for Class III inventory.
- Vehicle-based camping only in campgrounds. No campfires outside of campgrounds.
- No new motorized or mechanized routes; motorized/mechanized travel limited to designated routes.
- Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A).
- No commercial or private use of woodland products.

ACEC-4

Cottonwood-Diamond Watershed (35,830 acres) will be designated as an ACEC.

Special Management: To protect the relevant and important values of natural systems, and to mitigate the natural hazards due to fire, the following management prescriptions will apply:

- Continue to keep area not available to livestock grazing.
- Close to vehicle use at the end of the Class B-road system, except for administrative access.
- No new mechanized or motorized routes. Motorized and mechanized travel limited to designated routes outside the WSA, and closed in the WSA.
- No competitive events.
- Suspend commercial permits (guiding or special groups).
- ACEC will only be designated until hazard is no longer present. At that point, management will revert to the IMP.
- About 34,027 acres within the WSA are closed to oil and gas leasing, and the remaining 1,804 acres will be managed as no surface occupancy for oil and gas leasing. Other surface-disturbing activities will be precluded (see Appendix A).

ACEC-5

Highway 279/Shafer Basin/Long Canyon (13,500 acres) will be designated as an ACEC.

Special Management: To protect the relevant and important values of scenery, wildlife, natural systems (threatened, sensitive, and endangered plants), and cultural resources, the following management prescriptions will apply:

- Designate Highway 279 and Long Canyon as VRM Class II; manage the remainder of the ACEC as VRM I.
- Permitted activities will be confined to main roads within crucial bighorn lambing habitat from April 1 through June 15. This restriction will not apply to filming if the filming meets the minimum impact criteria (see Appendix H).
- Wall Street rock art sites will be managed for public use with the emphasis on interpretation.
- Motorized and mechanized travel limited to designated routes.
- Vehicle-based camping only in designated campgrounds.
- No campfires except in campgrounds.
- Retain ACEC in public ownership except for the previously initiated Moab Salt Exchange Parcel (635 acres). Manage the entire area as no surface occupancy for oil and gas leasing and preclude other surface-disturbing activities.

ACEC-6

Mill Creek Canyon (3,721 acres) will be designated as an ACEC. This area excludes the Mill Creek Canyon WSA. The Mill Creek Canyon WSA (9,780 acres) will be managed according to the IMP to protect wilderness values.

Special Management: To protect the relevant and important values of cultural resources, scenery, natural systems: (cold water fishery/riparian/watershed and wildlife), the following management prescriptions will apply to 3,721 acres in the ACEC:

- Recreation activities will be managed according to the South Moab SRMA.

- Prioritize Mill Creek for Class III cultural inventory.
- Protect Native American traditional cultural places.
- Designate as VRM Class II.
- Livestock grazing will not be available.
- No vehicle-based camping.
- No campfires in riparian areas.
- Motorized competitive events will be prohibited.
- No new mechanized or motorized routes. Motorized and mechanized travel limited to designated routes.
- All recreational events will be confined to the designated roads in the ACEC.
- Limit recreation facility development to day-use only.
- Acquire state land within ACEC as the opportunity arises.
- Maintain 3 cfs in the South Fork of Mill Creek below the Sheley diversion.
- Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A).
- No recreational mining will be allowed.
- No fuel wood harvesting permits will be issued.
- Private wood gathering for backpacking campfires will be allowed in the uplands only.

ACEC-7

Ten Mile Wash (4,980 acres) will be designated as an ACEC.

Special Management: To protect the relevant and important values of natural systems (riparian/wetlands), wildlife, cultural resources and natural hazards, the following management prescriptions will apply:

- Prioritize Ten Mile for Class III cultural inventory.
- Prioritize Ten Mile as a scientific research area.
- Grazing will be allowed on a limited basis in Ten Mile Canyon downstream from Dripping Springs, with changes subject to future monitoring and conformance with Standards for Rangeland Health.
- Prioritize area for riparian restoration.
- Restrict camping and campfires to designated sites at Dripping Spring.
- Motorized and mechanized travel limited to designated routes.
- No competitive events.
- Establish speed limits.
- Reroute designated road around the wetlands south of the cattle guard near Dripping Springs.
- Restrict vehicle access at the Green River; designate a parking area at the Green River.
- Permits for motorized recreational use may be required if monitoring indicates long-term damage.
- Require permits for groups greater than 25 vehicles.
- Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A).
- No commercial or private collection of woodland products.

SPECIAL DESIGNATIONS: NATIONAL TRAILS AND BACKWAYS (TRA)

Management Decisions:

National Historic Trail – Old Spanish Trail

TRA-1

Segments of the Old Spanish Trail will be identified and classified for historic integrity and condition. These segments will then be designated for appropriate types of management and travel.

TRA-2

Landmarks along the Old Spanish Trail will be identified for historic integrity and interpreted only if the action will not impact the values at the site. All interpretation projects will be done in consultation with Native Americans and other interested parties including the Old Spanish Trail Association and National Park Service.

TRA-3

Consider plan amendment, as necessary, to incorporate provisions of the forthcoming Old Spanish Trail Comprehensive Management Plan.

TRA-4

Participate in the development of the management plan for the Old Spanish Trail Comprehensive Management Plan and assist with its implementation as opportunities arise, consistent with other decisions of the RMP.

TRA-5

Support protective management, interpretation, and public enjoyment and understanding of the National Historic Old Spanish Trail, consistent with the Old Spanish Trail Comprehensive Management Plan.

TRA-6

Seek to acquire public access to the site of the Old Spanish Trail ford of the Green River, upstream from the town of Green River, Utah, for the purpose of developing an interpretive site.

TRA-7

Consistent with the Cameo Cliffs and Canyon Rims Recreation Area Management Plans (RAMPs), consider developing and managing a section of the Old Spanish Trail for equestrian use.

SPECIAL DESIGNATIONS: WILD AND SCENIC RIVERS (WSR)

Goals and Objectives:

Review all eligible rivers to determine suitability for Congressional designation into the National Wild and Scenic River System (NWSRS).

To the extent of the BLM's authority (limited to BLM lands within the river corridor), maintain and enhance the free flowing character, preserve and enhance the outstandingly remarkable values, and allow no activities within the river corridor that will alter the classification of those river segments determined suitable for congressional designation in the NWSRS until Congress acts.

Management Decisions:

WSR-1

River segments found suitable and recommended for designation will be managed to protect their free-flowing condition and to protect the outstandingly remarkable values and maintain the tentative classification within line-of-sight up to 1/4 mile (1/3 miles on the Colorado and Dolores Rivers) from the high water mark on each bank of the river (not to exceed 320 acres per mile). Management that will apply should any rivers be designated by Congress is identified in BLM Manual 8351.51 (see Appendix P and Map 22 for river segments found suitable for WSR designation).

WSR-2

BLM will not seek water rights as part of a suitability decision made in the Record of Decision for this RMP.

WSR-3

WSR segments recommended as suitable for Wild will be designated as VRM Class I, closed to oil and gas leasing and closed to motorized travel; Scenic and Recreational segments will be designated as VRM Class II, managed with a no surface occupancy for oil and gas leasing and other surface disturbing activities, and managed with travel limited to designated routes.

WSR-4

OHV travel will be limited to designated routes or closed, depending on the river segment.

WSR-5

The stipulations that will be applied to oil and gas leasing and other surface-disturbing activities within suitable river segments have been developed based on other resource values such as scenery, wildlife and fisheries, riparian, and recreation. In all cases, these stipulations are sufficient to protect the outstandingly remarkable values. All suitable segments will be managed with a no surface occupancy stipulation for oil and gas leasing as well as all other surface-disturbing activities, or as closed to oil and gas leasing (see Appendix A and Map 12 for the surface stipulations application to oil and gas leasing and other surface-disturbing activities).

WSR-6

BLM will work with the State of Utah, local and tribal governments, and other federal agencies, in a state-wide study, to reach consensus regarding recommendations to Congress for the inclusion of rivers in the National Wild and Scenic Rivers System. Besides applying consistent criteria across agency jurisdictions, the joint study will avoid piecemealing of river segments in logical watershed units in the state. The study will evaluate, in detail, the possible benefits and effects of designation on the local and state economies, agricultural and industrial operations and interests, outdoor recreation, natural resources (including the outstandingly remarkable values for which the river was deemed suitable), water rights, water quality, water resource planning, and access to and across river corridors within, and upstream and downstream from the proposed segment(s). Actual designation of river segments will only occur through congressional action or as a result of Secretarial decision at the request of the Governor in accordance with provisions of the Wild and Scenic Rivers Act (the Act). BLM will work with the State, local and tribal governments, and the agencies involved, to coordinate its decision making on wild and scenic river issues and to achieve consistency wherever possible.

WSR-7

BLM recognizes that water resources on most river and stream segments within the State of Utah are already fully allocated. Before stream segments that have been recommended as suitable under this Approved RMP are recommended to Congress for designation, BLM will continue to work with affected local, state, federal and tribal partners to identify in-stream flows necessary to meet critical resource needs, including values related to the subject segment(s). Such quantifications will be included in any recommendation for designation.

WSR-8

BLM will then seek to jointly promote innovative strategies, community-based planning, and voluntary agreements with water users, under State law, to address those needs.

WSR-9

Should designations occur on any river segment as a result of Secretarial or congressional action, existing rights, privileges, and contracts will be protected. Under Section 12 of the Act, termination of such rights, privileges, and contracts may happen only with the consent of the affected non-federal party. A determination by the BLM of eligibility and suitability for the inclusion of rivers on public lands to the Wild and Scenic Rivers System does not create new water rights for the BLM. Federal reserved water rights for new components of the Wild and Scenic Rivers System are established at the discretion of Congress. If water is reserved by Congress when a river component is added to the Wild and Scenic rivers System, it will come from water that is not appropriated at the time of designation, in the amount necessary to protect features which led to the river's inclusion into the system. BLM's intent will be leave existing water rights undisturbed and to recognize the lawful rights of private, municipal and state entities to manage water resources under state law to meet the needs of the community. Federal law, including Section 13 of the Act and the McCarren Amendment (43 U.S.C. 666), recognizes state jurisdiction over water allocation in designated streams. Thus, it is BLM's position that existing water rights, including flow apportioned to the State of Utah interstate agreements and compacts, including the Upper Colorado River Compact, and developments of such rights will not be

affected by designation or the creation of the possible federal reserved water right. BLM will seek to work with upstream and downstream water users and applicable agencies to ensure that water flows are maintained at a level sufficient to sustain the values for which affected river segments were designated.

WSR-10

Designate Colorado River Segment 2 – (Westwater Canyon from Mile 125 to River Mile 112) as suitable for recommendation into the National Wild and Scenic Rivers System with a classification of “Wild”.

WSR-11

Designate Colorado River Segment 3(a) – (River Mile 112 to Cisco Wash) as suitable for recommendation into the National Wild and Scenic Rivers System with a classification of “Scenic”.

WSR-12

Designate Colorado River Segment 3(b) – (Cisco Wash to the confluence of the Colorado with the Dolores River) as suitable for recommendation into the National Wild and Scenic Rivers System with a classification of “Recreational”.

WSR-13

Designate Colorado River Segment 4 – (Confluence of the Colorado with the Dolores River to Mile 49 near Potash) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Recreational”.

WSR-14

Designate Colorado River Segment 5 – (Mile 44.5 to Mile 38.5) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Scenic”.

WSR-15

Designate Colorado River Segment 6 – (Mile 37.5 to 34 at the Canyonlands National Park boundary) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Scenic”.

WSR-16

Designate Dolores River Segment 1 – (Colorado State line to Fisher Creek) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Recreational”.

WSR-17

Designate Dolores River Segment 2 – (Fisher Creek to Bridge Canyon) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Scenic”.

WSR-18

Designate Dolores River Segment 3 – (Bridge Canyon to the Colorado River) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Recreational”.

WSR-19

Designate Green River Segment 1 – (Coal Creek to Nefertiti Boat Ramp) as suitable for recommendation into the Wild and Scenic Rivers System with a classification “Wild”.

WSR-20

Designate Green River Segment 2 – (Nefertiti Boat Ramp to Swasey’s Boat Ramp) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Recreational”.

WSR-21

Designate Green River Segment 4(a) – (Mile 97 at the confluence with the San Rafael River to Canyonlands National Park boundary) as suitable for recommendation into the Wild and Scenic Rivers System with a classification of “Scenic”.

WSR-22

The suitability of Salt Wash is deferred until the National Park Service does its suitability study on the portion of Salt Wash that is within Arches National Park. Salt Wash remains eligible and is managed to protect its outstandingly remarkable values, free-flowing nature, and tentative classification. By default, the lower 0.25 miles of this 0.3 mile segment is within Segment 4 of the Colorado River. Consequently, it is managed as suitable with a “recreation” classification.

SPECIAL DESIGNATIONS: DESIGNATED WILDERNESS (DW)

Goals and Objectives:

Manage the Black Ridge Wilderness Area to provide for the protection of wilderness character and for the use and enjoyment of visitors in a manner that leaves it unimpaired for future use (43 CFR 8560).

Management Decisions:

DW-1

Manage Black Ridge Wilderness Area (5,200 acres; part of the McInnis Canyon National Conservation Area) in accordance with applicable law, regulation, policy, and management for the area (see Map 23).

DW-2

For designated Wilderness, any new development or surface disturbance is for wilderness purposes, and the lands are closed to mineral leasing and location. These are non-discretionary, non-planning decisions.

DW-3

Designate Black Ridge Wilderness Area as VRM I.

DW-4

Manage Black Ridge Wilderness Area as closed to motorized travel.

SPECIAL DESIGNATIONS: WILDERNESS STUDY AREAS (WSA)

Goals and Objectives:

Preserve the wilderness character of Wilderness Study Areas (WSAs) until Congress designates them wilderness or releases them.

Management Decisions:

WSA-1

Manage WSAs under the Interim Management Policy for Lands Under Wilderness Review (IMP; USDI-BLM 1995; see Map 23). Manage for the continued preservation of each WSA's wilderness character.

WSA-2

For WSAs, no surface disturbance, permanent new development, or ROWs are allowed, and the lands are closed to oil and gas leasing (see Appendix A).

WSA-3

Only Congress can release a WSA from wilderness consideration. Should any WSA, in part or in whole, be released from wilderness consideration, proposals in the released area will be examined on a case-by-case basis. All proposals inconsistent with the goals and objectives of the Approved RMP will be deferred until completion of requisite plan amendments. Because a plan amendment will be required, there is no separate analysis in this Land-use Plan to address resource impacts if any WSAs are released.

WSA-4

Fire activities and projects in WSAs will follow the IMP.

WSA-5

Designate WSAs as VRM Class I.

WSA-6

Under the Approved RMP, where routes will remain available for motorized use within WSAs, such use could continue on a conditional basis. Use of the existing routes in the WSAs ("ways" when located within WSAs – see Glossary) could continue as long as use of these routes does not impair wilderness suitability, as provided by the Interim Management Policy for Lands Under Wilderness Review (BLM 7/5/95). The miles of motorized routes in WSAs (see below for miles of route per WSA) are only conditionally open to vehicle use. If Congress designates the area as wilderness, the routes will be closed. In the interim, if use and/or non-compliance are found through monitoring efforts to impair the area's suitability for wilderness designation, BLM will take further action to limit use of the routes, or close them. The continued use of these routes, therefore, is based on user compliance and non-impairment of wilderness values.

WSA-7

Travel Management within WSAs:

- Behind the Rocks WSA (12,635 acres): Designate a portion of the Behind the Rocks WSA as closed to OHV use (11,822 acres). Designate OHV use in the remainder of the WSA as limited to designated routes (813 acres, with 0.9 miles of designated route).
- Black Ridge (52 acres) and Lost Spring Canyon (1,624 acres) WSAs Designate Black Ridge and Lost Spring Canyon WSAs as limited to designated routes, with 0.8 miles of route designated in Lost Spring Canyon WSA and 0 miles of route designated in Black Ridge WSA.
- Desolation Canyon (81,603 acres), Floy Canyon (72,605 acres), Flume Canyon (50,800 acres), Coal Canyon (60,755 acres), Mill Creek Canyon (9,780 acres), Negro Bill Canyon (7,820 acres), and Spruce Canyon (20,990 acres) WSAs: (Acreage of Desolation Canyon WSA is for the MPA portion only. Remainder of this WSA is managed by the Price Field Office. Acreage of Flume Canyon WSA includes 2,750 acres in areas administered by the Vernal Field Office.): Designate these WSAs as closed to OHV. No miles of route are designated.
- Westwater Canyon WSA (31,160 acres): Designate a portion of the Westwater Canyon WSA as closed to OHV (23,690 acres). Designate the remainder of the WSA as limited to designated routes, with no miles of route designated.

SPECIAL STATUS SPECIES (SSS)

Goals and Objectives:

Maintain, protect, and enhance habitats (including but not limited to designated critical habitat) of Federally listed threatened, endangered, or candidate plant or animal species to actively promote recovery to the point that they no longer need protection under the Endangered Species Act.

Maintain, protect, and enhance habitats of BLM (State) Sensitive plant and animal species to prevent the listing of these species under the Endangered Species Act.

Implement management strategies that restore degraded riparian communities; protect natural flow requirements; protect water quality; manage for stable, non-eroding banks; and manage for year-round flows where applicable.

Allow or participate in research of threatened and endangered (T&E) and Sensitive species and their habitats.

Avoid practices that permanently convert sagebrush shrubland to invasive species.

Management Decisions:

SSS-1

As required by the Endangered Species Act, implement recovery actions identified in Recovery Plans and in Conservation Agreements, Plans and Strategies in coordination with U.S. Fish and Wildlife Service (USFWS), Utah Division of Wildlife Resources (UDWR), and other interested entities. The BLM will be an active participant in all recovery implementation teams.

SSS-2

As required by the Endangered Species Act, the protection of habitat for listed and non-listed plant and animal species will be considered prior to authorizing any actions that could alter or disturb such habitat.

SSS-3

As required by the Endangered Species Act, no management action will be permitted on public lands that will jeopardize the continued existence of plant or animal species that are listed or are officially proposed or are candidates for listing as T&E.

SSS-4

As required by the Endangered Species Act, surveys of habitat or potential habitat for special status species (including any sensitive species under consideration for formal designation as T&E) will be made prior to taking any action that could affect these species. Surveys will be conducted using protocols established for potentially affected species.

SSS-5

As required by the Endangered Species Act, BLM will conduct or cooperate in surveys to determine the extent of listed and non-listed plant and animal species and their habitat or potential habitat. Any listed or non-listed special status species survey must be conducted by qualified biologists, botanists, or ecologists that have been approved by the BLM.

SSS-6

As required by the Endangered Species Act, monitoring, using approved protocol, will be required on listed and non-listed special status species habitat that may be affected by BLM authorization of any activities within that habitat.

SSS-7

As required by the Endangered Species Act, follow current and future recovery plans and manage habitat for T&E and BLM Sensitive species:

- Colorado Squawfish Recovery Plan.
- Colorado Pikeminnow Recovery Goals: amendment and supplement to the Colorado Squawfish Recovery Plan.
- Humpback Recovery Plan.
- Humpback Chub Recovery Goals: amendment and supplement to the Humpback Recovery Plan.
- Bonytail Recovery Plan.
- Bonytail Recovery Goals: amendment and supplement to the Bonytail Recovery Plan.
- Razorback Sucker Recovery Plan.
- Razorback Recovery Goals: amendment and supplement to the Razorback Sucker Recovery Plan.
- Black-footed Ferret Recovery Plan.
- Northern States Bald Eagle Recovery Plan.
- Recovery Plan for the Mexican Spotted Owl.
- Recovery Plan Southwestern Willow Flycatcher.

SSS-8

As required by the Endangered Species Act, support and implement special status plant and animal Species Management Plans. Coordinate actions with UDWR and other involved entities. Support population and habitat monitoring.

SSS-9

As required by the Endangered Species Act, support and implement current and future special status plant and animal species Conservation Plans, Strategies, and Agreements. Coordinate actions with USFWS and other involved entities. Support population and habitat monitoring. As of 2005, Conservation Plans Strategies and Agreements include:

- Colorado River Cutthroat Trout Conservation Agreement and Strategy Conservation Agreement for the Roundtail Chub, Bluehead Sucker and Flannelmouth Sucker (see Map 24).
- Follow current and future Conservation Measures and Best Management Practices (BMP) for Federally Listed Species (see Appendix R). Species include but are not limited to: Jones

Cycladenia, Mexican Spotted Owl, Southwestern Willow Flycatcher, Bald Eagle, and the Endangered Fish of the Colorado River.

SSS-10

As required by the Endangered Species Act, work with UDWR to implement the Utah Wildlife Action Plan (UDWR 2005a) to coordinate management actions that will conserve native species and prevent the need for additional listings.

SSS-11

As required by the Endangered Species Act, mitigate all unavoidable habitat losses for special status species as required by policy or law.

SSS-12

As required by the Endangered Species Act, avoid construction of new roads within listed and non-listed special status plant and animal species habitats.

SSS-13

As required by the Endangered Species Act, apply lease notices for listed plant and animal species as determined by Section 7 consultation between BLM and USFWS. Apply appropriate lease notices for any non-listed special status plant and animal species that occur or could potential occur applicable proposed lease areas.

SSS-14

As required by the Endangered Species Act, develop cooperative agreements with other agencies or entities to inventory and/or monitor existing or potential habitat for listed and non-listed special status plant and animal species.

SSS-15

As required by the Endangered Species Act, plan and implement assessment and monitoring plans for T&E and BLM Sensitive species.

SSS-16

As required by the Endangered Species Act, participate in the Colorado River Fishes Recovery and Implementation Program.

SSS-17

As required by the Endangered Species Act, coordinate with USFWS and UDWR to allow for the reintroduction of T&E and BLM Sensitive species into historic or suitable range. These reintroductions will be analyzed with site-specific NEPA.

SSS-18

As required by the Endangered Species Act, allow translocations and population augmentation of special status species to aid in conservation and recovery efforts. Implement necessary habitat manipulations and monitoring to ensure successful translocation efforts.

SSS-19

As required by the Endangered Species Act, apply environmental best management practices (BMPs) to all oil and gas operations in accordance with WO IM 2007-021 and the latest version of the "Goldbook" (see Appendix A).

SSS-20

Mexican Spotted Owl (MSO):

- If BLM determines that a proposed action may affect MSO or its habitat, consultation with the USFWS will be initiated (see Map 25).
- Monitor and protect known Protected Activity Center (PAC) sites according to USFWS recommendations and MSO Recovery Plan.
- Manage habitat for MSO according to USFWS and UDWR recommendations and recovery plans.
- Develop cooperative agreements with other agencies and entities to inventory and monitor existing potential habitat and annually schedule assessment plans of MSO habitat to determine quality of habitat and presence of species.
- Protect occupied and potential habitat, including designated critical habitat for the MSO, by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A). These stipulations will preclude temporary activities within designated critical habitat from March 1 through August 31. Permanent actions are prohibited year-round within 0.5 miles of a PAC.

SSS-21

Southwestern Willow Flycatcher (SWFL):

- If BLM determines that a proposed action may affect SWFL or its habitat, consultation with the USFWS will be initiated.
- Monitor and protect known nesting sites according to USFWS recommendations and SWFL Recovery Plan.
- Manage habitat for SWFL according to USFWS and UDWR recommendations and recovery plans; avoid loss or disturbance of suitable riparian habitat.
- Develop cooperative agreements with other agencies and entities to inventory and monitor existing potential habitat and annually schedule assessment plans of SWFL habitat to determine quality of habitat and presence of species.
- Protect SWFL and their habitat by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A) within suitable habitat. These stipulations will preclude activities within a 100-m buffer of suitable habitat year long. Activities within 0.25 miles of occupied breeding habitat will not occur during the breeding season, May 1 through August 15.

SSS-22

Bald Eagle:

- Acquire lands with roost and nest sites through land exchange, purchase or donation. Conduct assessments of wintering bald eagle habitat to delineate essential winter habitat and to develop necessary protective measures.
- Monitor nesting territories annually during breeding season (generally January 1 through August 31).
- Protect bald eagle nest sites by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A) within 1.0 mile of documented nest sites (2,439 acres). These stipulations will preclude surface-disturbing activities within a 1.0 mile radius of nest sites from January 1 through August 31 (see Map 26). No permanent structures will be allowed within 0.5 miles of known bald eagle nest sites year-round. Deviations may be allowed only after appropriate levels of consultation and coordination with the USFWS.
- Protect bald eagle winter habitat by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A) within 0.5 mile of winter roost areas. These stipulations will preclude activities and permanent structures within a 0.5 mile radius of winter roost sites from November 1 through March 31 (see Map 26). No permanent structures will be allowed within 0.5 mile of winter roost sites, if the structure will result in the habitat becoming unsuitable for future winter roosting by bald eagles.

SSS-23

Greater Sage-grouse:

- Implement the most current UDWR Strategic Management Plan for Sage-Grouse (UDWR, 2002 and its future revisions), the BLM National Sage-Grouse Habitat Conservation Strategy (BLM, 2004) and recommendations from local sage grouse working groups to protect, maintain, enhance, and restore Greater sage-grouse populations and habitat. About 3,068 acres of potential habitat has been identified within the Moab planning area. There is no sage grouse occupation at this time. However, if occupation is identified, through coordination with UDWR, the following decisions will apply:
 - ♦ All surface disturbing activities will be prohibited within 0.5 miles of Greater sage-grouse leks on a year-round basis
 - ♦ Allow no surface disturbing or otherwise disruptive activities within two miles of Greater sage-grouse leks from March 15 to July 15 to protect nesting and brood rearing habitat.
 - ♦ Allow no surface disturbing or otherwise disruptive activities within Greater sage-grouse winter habitat (3,058 acres) from November 15 to March 14.

See Appendix A for oil and gas leasing stipulations, along with exceptions, modifications, or waivers.

SSS-24

Gunnison sage-grouse habitats:

- Implement the most current UDWR Strategic Management Plan for Sage-Grouse (UDWR, 2002 and its future revisions), the Gunnison Sage-grouse Range-wide Conservation Plan (2005, as amended) and recommendations from local sage-grouse working groups to protect, maintain, enhance, and restore Gunnison sage-grouse populations and habitat. About 175,727 acres of potential habitat has been identified within the Moab planning area. There is no Gunnison sage grouse occupation at this time. However, if occupation is identified, through cooperation with UDWR, the following decisions will apply:
 - All surface disturbing activities will be prohibited within 0.6 miles of Gunnison sage grouse leks on a year-round basis. Within the 0.6 mile buffer, allow no permanent above-ground facilities or powerlines; prohibit or limit year-round construction of fences and where opportunity exists, remove existing fences.
 - Within four miles of a lek, avoid fence construction, overhead powerline construction, and aboveground structures that provide raptor hunting perches. Where fences are necessary, increase their visibility. Modify or remove fences to minimize sage-grouse mortality.

See Appendix A for oil and gas leasing stipulations, along with exceptions, modifications, or waivers.

SSS-25

White-tailed and Gunnison Prairie Dogs:

- The White-tailed prairie dog and the Gunnison prairie dog are BLM and State sensitive species; translocations of these species will be considered in suitable unoccupied habitats (see Map 28).
- Manage both prairie dog species and their habitats in coordination with the UDWR. Apply habitat management guidance and population monitoring strategies as recommended in the newly developed multi-agency White-tailed and Gunnison's Prairie Dog Management Plan.
- Develop cooperative agreements with other agencies to inventory prairie dog densities and identify suitable habitat for expansion.

SSS-26

White-tailed Prairie Dog Habitat:

- Manage the contiguous 117,481 acres of historic habitat designated by UDWR. Apply a controlled surface use stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) within 660 feet of active prairie dog colonies. This stipulation will preclude surface-disturbing activities within 660 feet of these colonies. No permanent above-ground facilities will be allowed within the 660-foot buffer.

SSS-27

Gunnison Prairie Dog Habitat:

- Manage 10,700 acres of habitat designated by UDWR for Gunnison prairie dogs. Apply a controlled surface use stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) within 660 feet of active prairie dog colonies. This stipulation will preclude surface-disturbing activities within 660 feet of these colonies. No permanent above-ground facilities will be allowed within 660 feet of prairie dog colonies. Power lines will be avoided within prairie dog colonies; however in the event that power lines are required within colonies, raptor anti-perch devices will be required.

SSS-28

Colorado River Endangered Fish:

- No surface-disturbing activities within the 100-year floodplain of the Colorado River, Green River, and at the confluence of the Dolores and Colorado Rivers will be allowed. Any exceptions to this requirement will require consultation with the USFWS. Restrictions on surface disturbance within this critical habitat will be developed through this consultation process (see Map 24).

SSS-29

Golden Eagle:

- Known golden eagle nest sites will be protected according to the Bald and Golden Eagle Protection Act amended in 1978.
- Acquire lands with nest and roost sites through land exchange or acquisition.
- Conduct assessments of wintering golden eagle habitat.
- Protect golden eagle nest sites and habitat (12,902 acres) by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A). These stipulations will preclude surface-disturbing activities within 0.5 miles of documented nest sites from February 1 to July 15 (see Map 26).

SSS-30

Burrowing Owl:

- Protect burrowing owls by applying the standard terms and conditions developed in consultation with the USFWS (see Appendix R) for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A) by precluding surface-disturbing activities within 0.25 miles of known nests from March 1 through August 31 (see Map 29).
- Domestic sheep camps, temporary watering sites, and salt and mineral blocks will not be located within 0.25 miles of occupied burrowing owl nests from March 1 through August 31.

- Maintain ground squirrel and prairie dog colonies to provide habitat and nesting burrows for burrowing owls.
- The species will be managed under the guidance provided by the Raptor Best Management Practices (BMPs; see Appendix R), which includes implementation of spatial and seasonal buffers to protect nesting raptors and their habitats.

SSS-31

Kit Fox:

- Protect kit fox by precluding surface-disturbing activities within 200 meters of a kit fox den.

SSS-32

Ferruginous Hawk:

- Manage ferruginous hawk nesting and foraging habitat by applying the standard terms and conditions developed in consultation with the USFWS (see Appendix R) for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A) precluding surface-disturbing activities within 0.5 miles of active nests from March 1 through August 1 (see Map 29).
- Domestic sheep camps, temporary watering sites, and salt and mineral blocks will not be located within 0.5 miles of occupied ferruginous hawk nests from March 1 through Aug. 1.
- The species will be managed under the guidance provided by the Raptor BMPs (see Appendix R), which includes implementation of spatial and seasonal buffers to protect nesting raptors and their habitats.

SSS-33

Yellow-billed Cuckoo:

- Avoid loss or disturbance of yellow-billed cuckoo habitat and manage yellow-billed cuckoo nesting and foraging habitat by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A). These stipulations preclude surface-disturbing activities within 100 meters of yellow-billed cuckoo habitat within riparian areas from May 15 through July 20.
- Compliance with BLM Riparian Policy will restrict surface disturbance within 100 meters of riparian habitat and will therefore protect nesting habitat for yellow-billed cuckoo.

SSS-34

Jones *Cycladenia* (*Cycladenia humilis* var. *jonesii*):

- Require specific site inventories for all surface disturbing projects in areas with suitable *Cycladenia humilis* var. *jonesii* habitat.
- BLM will restrict activities, in suitable *Cycladenia humilis* var. *jonesii* habitat. Restrictions include limiting motorized travel to designated routes, precluding surface disturbing

activities within 300 feet of plants and suitable habitat, and precluding construction activities from May 15th through June 30th within occupied habitat (see Standard Terms and Conditions (Lease Notices) which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A). Other restrictions include avoiding road construction, land disposal, and utilities in this habitat, as well as avoiding grazing activities such as trailing, salting, watering and herding.

SSS-35

California Condor:

- Within potential habitat for the California Condor, surveys will be required prior to operations unless species occupancy and distribution information is complete and available.
- Surface disturbing activities will not occur within 1.0 miles of nest sites during the breeding season of August 1 to November 30 or within 0.5 miles of established roosting sites (see Standard Terms and Conditions (Lease Notices) which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A).
- No permanent infrastructure will be placed with 1.0 mile of nest sites and within 0.5 miles of established roosting sites.

TRAVEL MANAGEMENT (TRV)

Management Decisions:

Motorized Travel

TRV-1

Where routes will remain available for motorized use within WSAs, such use could continue on a conditional basis. Use of the existing routes in the WSAs ("ways" when located within WSAs – see Glossary) could continue as long as use of these routes does not impair wilderness suitability, as provided by the Interim Management Policy for Lands Under Wilderness Review (BLM 7/5/95). The 1.7 miles of motorized routes in WSAs are only conditionally open to vehicle use. If Congress designates the area as wilderness, the routes will be closed. In the interim, if use and/or non-compliance are found through monitoring efforts to impair the area's suitability for wilderness designation, BLM will take further action to limit use of the routes, or close them. The continued use of these routes, therefore, is based on user compliance and non-impairment of wilderness values.

TRV-2

BLM, in preparing its RMP designations and its implementation-level travel management plans, is following policy and regulation authority found at: 43 CFR Part 8340; 43 CFR Subpart 8364; and 43 CFR Subpart 9268.

TRV-3

Provide opportunities for a range of motorized recreation experiences on public lands while protecting sensitive resources and minimizing conflicts among various users. Identification of specific designated routes will be initially established through the chosen Travel Plan accompanying this RMP (see Appendix N) and may be modified through subsequent implementation planning and project planning on a case-by-case basis. These identified routes will be available regardless of other management actions. These adjustments will occur only in areas with limited route designations and will be analyzed at the implementation planning level. These adjustments will be done through a collaborative process with local government and will include public review of proposed route changes. Site-specific NEPA documentation will be required for changes to the route designation system.

TRV-4

All areas are limited, open, or closed to motorized travel. Limit travel by motorized vehicle on all lands administered by the MFO to designated routes, except for Managed Open Areas, and for areas that are closed to motorized travel (see Map 30; see Appendix N for Travel Plan development).

TRV-5

BLM could impose limitations on types of vehicle allowed on specific designated routes if monitoring indicates that a particular type of vehicle is causing disturbance to the soil, wildlife, wildlife habitat, cultural or vegetative resources, especially by off-road travel in an area that is limited to designated roads.

TRV-6

OHV access for game retrieval, antler collection and dispersed camping will only be allowed on designated routes (designated routes/spurs and have been identified specifically for dispersed camping; parking areas associated with dispersed campsites will be marked during travel plan implementation). Adherence to the Travel Plan is required for all activities, except where otherwise explicitly permitted.

TRV-7

Only designated roads and managed open areas are available for motorized commercial and organized group use (see Maps 2 and 3 for route designations).

TRV-8

Where the authorized officer determines that off-road vehicles are causing or will cause considerable adverse impacts, the authorized officer shall close or restrict such areas. The public will be notified as to these closures and restrictions.

TRV-9

Any routes that are not baseline routes will be signed "Closed" on the ground. Such routes will be considered as impacts to the area's natural character, and use of such routes will be considered cross country use and not allowed. Non-inventoried routes should be rehabilitated.

TRV-10

OHV Designations:

- About 339,298 acres will be closed to OHV travel.
- About 1,481,334 acres will be limited to designated routes.
- Approximately 2,000 acres (White Wash Sand Dunes) will be open to cross country travel (see Map 30).

TRV-11

Designated Routes – Motorized:

- Designate 3,693 miles of motorized routes.
Designate 313 miles for motorcycles (163 miles on inventoried routes and 150 miles on inventoried single-track).
- Designate a dirt bike route from Colorado State Line to Thompson (see Map 3), utilizing 9 miles of single-track designated above and 22 miles of inventoried Grand County roads.

These totals are reflected in the mileage under "designated routes."

Mountain Bike Travel

TRV-12

Provide opportunities for mechanized (mountain bike) travel on all routes open to motorized use.

TRV-13

Prohibit new bike routes within non-WSA lands managed for wilderness characteristics or within hiking Focus Areas.

TRV-14

Limit mechanized (mountain bike) travel to designated trails and managed routes for resource protection purposes. Routes that are no longer available for motorized travel may be converted to bike routes upon application of site-specific NEPA analysis.

TRV-15

Manage approximately 11.2 miles of routes on the following trails for non-motorized use only: Jackson Trail, "Baby Steps," Hunter Canyon Rim, Portal Trail, Hidden Valley, and Porcupine Rim single-track section (Hidden Valley and Porcupine Rim Trails are subject to IMP).

TRV-16

Identification of specific designated mountain bike routes will be initially established through the RMP process and may be modified through subsequent planning at the activity plan and project plan levels on a case-by-case basis. These modifications will be analyzed through site-specific NEPA.

TRV-17

Design and implement up to 150 new miles of managed mechanized (mountain bike) trails. In addition, convert existing inventoried routes not designated for motorized travel to non-motorized use, where appropriate, and install appropriate support facilities such as trailheads and route signage.

TRV-18

Initially designate the following existing trails for mechanized (mountain bike) use totaling 11.3 miles; see Map 4):

- Fisher Mesa (in conjunction with USFS; 5.8 miles)
- Pothole (on Amasa Back; 1.2 miles)
- Rockstacker (on Amasa Back; 0.9 miles)
- Lower Porcupine Singletrack ("LPS"; 1.4 miles)
- Power line Trail (0.07 miles on public land)
- Mill Creek Parkway Extension (0.16 miles on public land)

Non- Mechanized Travel (Hiking and Equestrian)

TRV-19

Non-mechanized travel is not restricted on public lands except where limited or prohibited to protect specific resource values, provide for public safety or maintain an identified opportunity.

TRV-20

Provide opportunities for non-mechanized travel on all routes open to motorized or mechanized use and manage routes identified to exclude motorized and mechanized use and provide opportunities for non-mechanized travel independent of motorized and mechanized routes.

TRV-21

Limit non-mechanized travel on specific lands to designated trails and managed routes for resource protection purposes.

TRV-22

Manage 17 miles of routes on the following trails for non-mechanized use:

- Amphitheater Loop
- Fisher Towers
- Negro Bill - There is no equestrian use allowed on the Negro Bill trail.
- Corona Arch
- Trough Spring Canyon
- Anticline Overlook
- Needles Overlook
- Windwhistle Nature Trail
- Mill Canyon Dinosaur Interpretive Trail
- Copper Ridge Sauropod Interpretive Trail
- Sego Canyon Interpretive Trail

TRV-23

Identify specific routes through the RMP process. These routes may be modified through subsequent planning at the RMP, activity plan, and project plan levels on a case-by-case basis.

TRV-24

Work with equestrian groups to identify additional trails for equestrian and hiker use only. These trails will be designated based on site-specific NEPA analysis.

TRV-25

Design and implement up to 50 miles of managed non-mechanized trail system consistent with the Travel Plan. Implement these new system routes largely by converting existing, low utilization roads to non-mechanized use and installing appropriate support facilities such as trailheads and route signage.

TRV-26

Mark the following existing hiking trails: Castleton, Culvert-Goldbar Loop. Mark a new trail from Onion Creek to Amphitheater Loop.

TRV-27

The following trails will be managed for equestrian use. Hikers will also be allowed on these trails, but there will be no motorized or mechanized vehicles allowed:

- Onion Creek Benches (Colorado Riverway SRMA)
- Ida/Stearns Gulch Equestrian Trail System
- Castle Creek Equestrian Trail
- Rattlesnake Trail above Nefertiti Boat Launch
- Seven Mile Canyons
- Red Rock Horse Trail (Ken's Lake to Johnson's Up-on-Top)

VEGETATION (VEG)

Goals and Objectives:

Manage vegetation resources for desired future conditions (DFC) ensuring ecological diversity, stability, and sustainability, including the desired mix of vegetation types, structural stages, and landscape/riparian function and provide for livestock grazing and for native plant, fish, and wildlife habitats (see Appendix S for Desired Future Conditions for Vegetation).

Maintain existing vegetation treatment areas as appropriate.

Control invasive and non-native weed species and prevent the introduction of new invasive species by implementing a comprehensive weed program (as per national guidance and local weed management plans in cooperation with state, federal affected counties), including: coordination with partners; prevention and early detection; education; inventory and monitoring; and using principles of integrated weed management.

Manage for vegetation restoration, including control of weed infestations and control of invasive and undesirable nonnative species.

Maintain, protect and enhance special status plant and animal habitats in such manner that the potential need to consider any of these species for listing as threatened or endangered under the Endangered Species Act does not arise.

Develop management prescriptions for all surface-disturbing resource uses during times of extended drought (see description of Adaptive Drought Management, below).

Maintain or enhance the integrity of current sagebrush and sage steppe communities and identify areas in need of restoration. Initiate restoration and/or rehabilitation efforts to ensure sustainable populations of sage-grouse, mule deer and other sagebrush obligate species.

Management Decisions:

VEG-1

Utilize the BLM National Sage-grouse Conservation Strategy – Guidance for Management of Sagebrush Plant Communities for Sage-Grouse Conservation, when applicable, in the development and implementation of vegetation and land treatments, livestock manipulation techniques, fire projects, energy exploration and development and any surface-disturbing activity within sagebrush and sage steppe communities.

VEG-2

Sagebrush/steppe communities will be a high priority for wildfire suppression, emergency stabilization and fuel reduction to avoid catastrophic fires in these communities.

VEG-3

Reclaim and restore up to 257,809 acres of sagebrush habitat and shrub-steppe ecosystems where appropriate in accordance with the BLM sagebrush conservation guidance. Reclamation/restoration will be undertaken in cooperation with the Utah Partners for Conservation and Development (UPCD) and may include removing surface material, re-contouring, spreading topsoil, seeding or planting seedlings, and/or changing livestock grazing strategies, such as, changing season of use, type of use, removing or reducing spring grazing, reducing livestock numbers, reducing grazing intensity, improving distribution, requiring rest rotation practices, or exclusion. Work in coordination with UDWR to reduce wildlife numbers, as necessary, to restore sagebrush habitat.

VEG-4

Provide opportunities for seed gathering of various vegetation types while protecting other resources.

VEG-5

Restoration and rehabilitation will use native seed-mixes wherever possible. Non-native species may be used as necessary for stabilization or to prevent invasion of noxious or invasive weed species.

VEG-6

Gather necessary vegetation information and continue monitoring to assess if planning objectives are being met.

VEG-7

Utilize the techniques and methods for vegetation treatments identified in the Utah ROD for Vegetation Treatments using Herbicides on Bureau of Land Management Lands in Seventeen Western States (2007).

VEG-8

Control noxious weed species and prevent the infestation and spread of invasive species. Develop cooperating agreements with other Federal, State, local and private organizations to control invasive and noxious weed species.

VEG-9

Reduce tamarisk and Russian olive where appropriate using allowable vegetation treatments. Restore riparian habitat to native willow and cottonwood communities.

VEG-10

Where appropriate, replant cottonwoods and willow subsequent to wildland fire or other disturbance in riparian areas.

VEG-11

Promote science and research opportunities in the San Arroyo Area/Exclosures, Sagers Watershed Area/Exclosures and Big Flat Area/Exclosures (approximately 300 acres each).

VEG-12

Establish Lower South Fork of Seven Mile Canyon as a Riparian/Wetland Demonstration Area for the improvement and restoration of the riparian area.

VEG-13

Insect pests will be treated in coordination with the State of Utah, other Federal agencies, affected counties, adjoining private land owners and other directly affected interests.

VEG-14

See Livestock Grazing for other vegetation treatments.

VEG-15

Adaptive Drought Management: Establish criteria for restricting activities during drought (see Appendix T for Drought Classification System) based on the following measures/parameters:

Severe (D2):

- ♦ Send drought letters.
- ♦ UDWR coordination for big game herd control.
- ♦ Prepare local seasonal precipitation graphs.
- ♦ Suspend or limit seed collecting activities.

Extreme (D3):

- ♦ No new surface-disturbing activities in areas with sensitive soils (subject to valid existing rights or actions associated with other valid permitted activities; see oil and gas Appendix A for definition of surface-disturbing activities).
- ♦ Changes in livestock use will be based on site-specific data on those allotments that are affected by drought.
- ♦ OHV use and competitive motorized events will be confined to designated roads and routes within the open OHV area.
- ♦ Require additional erosion-control techniques/BMPs for surface-disturbing activities (e.g., hydromulching).
- ♦ Limit prescribed burns and vegetation treatments.

Exceptional (D4):

- ♦ Changes in livestock use will be based on site-specific data on those allotments that are affected by drought.
- ♦ No new surface-disturbing activities (subject to valid existing rights or actions associated with other valid permitted activities).
- ♦ Consider closing areas to public entry.

VEG-16

Avoid or minimize to the extent possible the loss of sagebrush/steppe habitat from BLM-initiated or authorized actions. The BLM recommends that loss of sagebrush/steppe habitat essential to wildlife (e.g., sage-grouse, mule deer, and sagebrush obligate species) be reclaimed or mitigated off-site.

VISUAL RESOURCES MANAGEMENT (VRM)

Goals and Objectives:

Manage public lands in a manner that protects the quality of scenic values.

Recognize and manage visual resources for overall multiple use, filming, and recreational opportunities for visitors to public lands.

Manage BLM actions to preserve those scenic vistas that are most important.

Management Decisions:

VRM-1

WSAs and designated wilderness are designated as VRM Class I.

VRM-2

Wild and Scenic River (WSR) segments recommended as suitable for Wild are designated as VRM Class I, Scenic segments are designated as VRM Class II, and Recreational segments are managed the same as the underlying VRM management class.

VRM-3

For all VRM classes, all resource uses and management activities are required to meet VRM objectives. However, recreation developments in the immediate foreground of Key Observation Points (KOPs) in VRM Class I and II areas require special consideration to meet both recreational and VRM objectives. These facilities often create more contrast than would be acceptable; however this contrast is allowed if the facilities are part of the expected image held by the public being served. The contrast should be allowed only to the extent needed for the function of the facility, which should reflect design excellence and be a positive element of the built environment. Structures should blend into the landscape while retaining functionality.

VRM-4

Apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A) in all areas designated as VRM Class I.

VRM-5

Apply a controlled surface use stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) to all areas designated as VRM Class II. This requires surface-disturbing activities to meet the objectives of VRM Class II.

VRM-6

Designated utility corridors within VRM Class II areas are designated as VRM Class III only for utility projects.

VRM-7

Necessary road maintenance could occur regardless of VRM class.

VRM-8

Public lands within the viewshed of Arches National Park are designated as VRM Class II.

VRM-9

Designated VRM management classes are displayed on Map 31.

VRM-10

Areas with high potential for development of oil and gas (Big Flat/Hatch Point/Lisbon Valley, and Eastern Bookcliffs/Greater Cisco) will be designated as VRM Class III with the exception of those portions of SRMAs and ACECS that have more stringent VRM classifications.

VRM-11

Manage the Shafer Basin portion of the Highway 279/Shافر Basin/Long Canyon ACEC as VRM Class I.

VRM-12

Scenic driving corridors will be designated as VRM Class II within a specified viewshed not to exceed 0.5 mile from centerline. Apply a controlled surface use stipulation for oil and gas leasing and other surface-disturbing activities (see Appendix A) within 0.5 mile of scenic driving corridors.

VRM-13

Manage the following areas with high-quality visual resources as VRM Class II (see Map 31):

- Sand Flats
- Gemini Bridges/Monitor and Merrimac/Poison Spider/Goldbar/ Corona Arch area
- The Colorado, Dolores and Green River corridors
- Tusher Canyon (Bookcliffs)
- The Colorado Riverway
- Matt Martin Point
- Areas bordering Arches National Park
- Kane Creek
- Hatch Wash
- The rims of Canyon Rims
- The Mill Creek and Behind the Rocks ACECs
- Beaver Creek
- Long Canyon

VRM-14

- Designate 358,911 acres as VRM Class I.
- Designate 365,566 acres as VRM Class II.
- Designate 829,158 acres as VRM Class III.
- Designate 268,133 acres as VRM Class IV.

WILDLIFE AND FISHERIES (WL)

Goals and Objectives:

Maintain, protect, and enhance habitats to support natural wildlife diversity, reproductive capability, and a healthy, self-sustaining population of wildlife and fish species.

Manage crucial, high-value, and unfragmented habitats as management priorities.

Management Decisions:

WL-1

Habitat Management Plans: Continue to implement and modify three Habitat Management Plans (HMPs) summarized in Appendix U: Hatch Point HMP, Dolores Triangle HMP, and the Potash-Confluence HMP.

- Hatch Point HMP: Manage to benefit pronghorn and improve sagebrush habitat for sage-grouse and other wildlife species. Emphasize habitat management, change in livestock class from sheep to cattle, and maintenance of land treatments.
- Potash-Confluence HMP: Manage to benefit desert bighorn sheep, but also include guidance for chukar partridge, bald eagle, and peregrine falcon. Water developments to benefit desert bighorn are to be maintained; under this HMP, 278,000 acres of land administered by the BLM are to be maintained in good condition and habitat is to be improved where needed. Eight specific management objectives were established (see Appendix U for details).
- Dolores Triangle HMP: Manage to benefit deer, elk, and bighorn sheep. Improve bald eagle, riparian and native and naturalized fish habitat through the installation of fencing and enclosures in Granite, Coates, Ryan, and Renegade Creeks by installing six in-stream structures (see Appendix U for details).

WL-2

Livestock grazing will not be authorized on the following allotments/areas (or portions of allotments/areas) in order to benefit wildlife resources:

- A portion of the Kane Spring Allotment (that portion in Kane Spring Canyon between the open valley and the river; 558 acres and 0 AUMs)
- An area along the Colorado River between Hittle and north of Dewey Bridge (400 acres, AUMs will remain the same)
- Between The Creeks with 3,960 acres and 221 AUMs
- North Sand Flats with 5,860 acres and 798 AUMs
- South Sand Flats with 10,209 acres and 592 AUMs
- A portion of Arth's Pasture Allotment (Poison Spider area; approximately 6,200 acres and 425 AUMs).

WL-3

Support and implement current and future animal species Conservation Plans, Strategies and Agreements. Coordinate actions with UDWR and other involved entities. Support population and habitat monitoring.

WL-4

Migratory Birds: Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds," will be integrated into all activities with potential adverse impacts, wildlife management programs, and other resources including but not limited to riparian-wetland habitat, rangeland health standards and guidelines raptor protection, fire, special status species, off-site mitigation and habitat enhancement. Management actions will emphasize birds listed on the current USFWS "Birds of Conservation Concern" (2002f or as updated) and Utah Partners-in-Flight priority species. Habitats that will be emphasized are the Cisco Desert Bird Habitat Conservation Area, Colorado and Dolores River Bird Habitat Conservation Area, Green River Bird Habitat Conservation Area, and the Cottonwood and Willow Creek Bird Habitat Conservation Area (see Appendix U). As a supplement to complying with Executive Order 13186, the Bird Habitat Conservation Areas identified in the Coordinated Implementation Plan for Bird Conservation in Utah (Martinsen et al. 2005 or as updated), will receive priority for conducting bird habitat conservation projects, through cooperative funding initiatives such as the Intermountain West Joint Venture.

WL-5

Migratory Birds: Implement Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds" during all activities to protect habitat for migratory birds. Management will emphasize birds listed on the current USFWS "Birds of Conservation Concern" (2002 or as updated) and Partners-in-Flight priority species (as updated).

WL-6

Migratory Birds: As specific habitat needs and population distribution to "Birds of Conservation Concern" and Partners-in-Flight priority species are identified, BLM will use adaptive management strategies to further conserve habitat and avoid impacts to these species.

WL-7

Migratory Birds: Prioritize the maintenance and/or improvement of lowland riparian, wetlands, and low and high desert scrub communities which are the four most important and used habitat types by migratory birds in MPA.

WL-8

Migratory Birds: Prevent the spread of invasive and non-native plants, especially cheatgrass, tamarisk, and Russian olive. Strive for a dense under story of native species in riparian areas with a reduction in tamarisk and improvement of cottonwood and willow regeneration.

WL-9

Migratory Birds: During nesting season for migratory birds (May 1 – July 31), avoid surface-disturbing activities and vegetative-altering projects and broad-scale use of pesticides in identified occupied migratory bird habitat.

WL-10

Coordinate with UDWR and other partners to help accomplish the population and habitat goals and objectives of big game Herd Management Plans that are consistent with and meet the goals and objectives of this land-use plan.

WL-11

The BLM will approach compensatory mitigation on an “as appropriate” basis where it can be performed onsite, and on a voluntary basis where it is performed offsite, or, in accordance with current guidance.

WL-12

Restrict dispersed camping in riparian areas to protect riparian wildlife habitat. Restrictions could include limiting camping to designated sites or prohibiting camping.

WL-13

Implement a limited fire suppression policy and initiate prescribed fires where treatment by fire will increase vegetation productivity and increase forage for wildlife.

WL-14

Modify the grazing season of use or change class of livestock for individual allotments as necessary to accommodate forage needs for wildlife.

WL-15

Predator management will continue to be coordinated with Animal and Plant Health Inspection Service (APHIS)-Wildlife Services and UDWR and will be conducted utilizing the guidance provided by the existing MOU with APHIS-Wildlife Services.

WL-16

BLM will continue to coordinate with, and provide support to UDWR for introduction/reintroduction of native or naturalized fish or wildlife species into historic or suitable habitats as determined appropriate.

WL-17

Introduction, transplantation, augmentation and re-establishment of both naturalized and native species will be considered and will include, but may not be limited to, pronghorn, desert bighorn sheep, wild turkey, bison, beaver, chukar, otter, and Colorado River cutthroat trout and other native and naturalized fish species, pursuant to guidance and direction provided in BLM's 1745 Manual.

WL-18

Raptors will be managed under the auspices of Best Management Practices (BMPs; see Appendix R), which will include implementation of spatial and seasonal buffers. These BMPs implement the USFWS's Guidelines for Raptor Protection From Human and Land-use Disturbances, with modifications allowed as long as protection of nests is ensured. Seasonal and spatial buffers are also listed in Appendix R. Cooperate with utility companies to prevent electrocution of raptors. Temporarily close areas (amount of time depends on the species) near raptor nest to rock climbers or other activities if the activity could result in nest abandonment.

WL-19

Support and implement where possible the Northern River Otter Management Plan; coordinate with UDWR to determine potential release sites; support population monitoring.

WL-20

Manage riparian areas to ensure a multi-aged, multi-layered structure, allowing for retention of snags and diseased trees. Provide multiple layers of vegetation (vertical structure) within 10 feet of the ground.

WL-21

Minor adjustments to crucial wildlife habitat boundaries periodically made by the Utah Division of Wildlife Resources (UDWR) will be accommodated through plan maintenance.

WL-22

Pronghorn Habitat: Manage 78,476 acres of current pronghorn habitat that UDWR has designated in the La Sal (Hatch Point Herd) Wildlife Management Unit. Implement the Hatch Point HMP. Manage 743,524 acres of pronghorn habitat that UDWR has designated in the Cisco Desert and on the following allotments (see Map 32):

- Cisco
- Cisco Mesa
- Harley Dome
- San Arroyo
- Horse Canyon
- Pipeline
- Floy Creek
- Athena
- Little Grand
- Corral Wash Canyon
- Agate, Little Hole
- Monument Wash
- Highlands
- 10-Mile Point
- Big Flat
- Ruby Ranch
- Bar-X
- Crescent Canyon
- Squaw Park
- San Arroyo

WL-23

Pronghorn Habitat: Management of pronghorn habitat (see Map 32) will be done in coordination with UDWR and may include (but will not be limited to) the following actions:

- Install and improve year-round water resources within the La Sal Management Unit and the Cisco Desert Herd unit.
- Support a change in class of livestock from sheep to cattle on the Hatch Point area.
- Change in class of livestock from cattle to sheep will not be allowed within pronghorn habitat.
- Install water developments every 2 square miles on summer and fawning areas.

- Construct fences that allow for pronghorn passage.
- Dismantle un-needed fences.
- Install restrictive fencing to stop pronghorn passage onto highways.
- Increase forage through vegetation treatments on approximately 4,400 acres.

WL-24

Pronghorn Habitat: Protect pronghorn fawning habitat (293,741 acres) within Cisco Desert and on Hatch Point (the La Sal Wildlife Management Units) by applying a timing limitation stipulation that will preclude surface-disturbing activities from May 1 to June 15 (see Appendix A).

WL-25

Pronghorn Habitat: Spring grazing will be adjusted on a case-by-case basis on 188,975 acres on allotments within crucial pronghorn habitat in the Cisco Desert to encourage forb production. These allotments include Athena, Cisco, Cisco Mesa, Harley Dome, and San Arroyo.

WL 26

Pronghorn Habitat: Develop, where applicable, a rest/rotation of pasture or other grazing management systems within allotments that have crucial pronghorn habitat to encourage forb production prior to fawning. Change in livestock class from sheep to cattle, fencing, seeding and rest/rotation to improve habitat will be encouraged.

WL-27

Bighorn Sheep Habitat: Film permits will comply with minimum impact criteria (see Appendix H) from April 1 through June 15 and from October 15 through December 15 within 123,490 acres of crucial bighorn sheep habitat (see Map 9).

WL-28

Bighorn Sheep Habitat: No change in class of livestock from cattle to sheep conversions are to be considered in recognized bighorn habitat. (see Maps 9 and 10).

WL-29

Bighorn Sheep Habitat: Follow the recommendations found in the BLM Bighorn Sheep Rangeland Management Plan, as revised (1993b); the Utah BLM Statewide Desert Bighorn Sheep Management Plan, as revised (1986a); and the Revised Guidelines for the Management of Domestic Sheep and Goats in Native Wild Sheep Habitats (BLM 1998a).

WL-30

Bighorn Sheep Habitat: Support the current bighorn sheep population and manage to increase desert bighorn population (prior stable numbers) on 330,892 acres. Population goals will be reached by releases, by reestablishment, and through change of livestock class and installation of new water facilities (see Appendix U for details).

WL-31

Bighorn Sheep Habitat: Management of bighorn sheep habitat in coordination with UDWR will include: installing water developments every 5 square miles in or within 2 miles of escape

terrain, precluding exotic ungulates, wild horses or burros within 10 miles of habitat, and constructing fences that allow for bighorn sheep passage (3 strands with bottom wire smooth) and dismantling un-needed fences.

WL-32

Bighorn Sheep Habitat: Manage 9,278 acres along the rim of Hatch Point as part of the Lockhart Bighorn Sheep habitat area. Apply a timing limitation stipulation to oil and gas leases and other permitted uses, which will restrict surface-disturbing activities from April 1 through June 15 for lambing and from October 15 through December 15 for rutting (see Appendix A).

WL-33

Bighorn Sheep Habitat: Manage 317,523 acres of desert bighorn sheep habitat on the following grazing allotments:

- Buckhorn
- North River
- Little Grand
- Taylor
- Ten Mile Point
- Arth's Pasture
- Spring Canyon Bottom
- Big Flat
- Kane Springs
- Potash
- Horsethief
- Behind the Rocks
- Ruby Ranch

WL-34

Bighorn Sheep Habitat: Support conversion of sheep AUMs to cattle on Hatch Point Allotment.

WL-35

Bighorn Sheep Habitat: Improve desert bighorn habitat by installing and improving year-round water resources within all desert bighorn habitat and provide additional water sources at a minimum spacing of one water development in each 2 square mile area on lambing grounds.

WL-36

Bighorn Sheep Habitat: To protect lambing, rutting, and migration habitat (101,897 acres), apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface-disturbing activities (see Appendix A). Within migration corridors pipeline construction and geophysical exploration for oil and gas development will be allowed outside lambing and rutting periods from June 16 through October 14 and from December 15 through March 31, respectively.

WL- 37

Bighorn Sheep Habitat: Manage lambing areas (46,319 acres - see Map 9) with the following prescriptions:

- Camping is allowed only in designated campsites except for areas within the Green River riparian corridor, which remain open to unrestricted camping.
- No camping in Shafer Basin and Long Canyon.
- Livestock use will be adjusted on North River and, Taylor Allotments (Dry Mesa Pasture).

WL- 38

Bighorn Sheep Habitat: Manage 310,726 acres of currently occupied Rocky Mountain bighorn habitat from the Green River to Pipeline Canyon according to stipulations described in management common to all. This management includes improving or maintaining habitat and vegetative conditions to benefit bighorn sheep while maintaining or improving the ecological condition of rangelands (see Map 10).

WL- 39

Bighorn Sheep Habitat: Support conversion of sheep to cattle on allotments that are within nine miles of the 310,726 acres of managed Rocky Mountain bighorn habitat. Once conversion occurs, do not allow re-conversion (from cattle to sheep). This includes the Cisco and Cisco Mesa Allotments, San Arroyo, Winter Camp and Harley Dome.

WL- 40

Deer and Elk Habitat: Manage UDWR current deer habitat of 534,329 acres in the Bookcliffs and 313,551 acres on the La Sal Mountains as mule deer habitat by improving or maintaining vegetative conditions to benefit both livestock and wildlife and by maintaining or improving the ecological condition of rangelands.

WL-41

Deer and Elk Habitat: Increase elk forage through vegetation treatments such as chemical, mechanical, and prescribed fire on approximately 40,000 acres of elk winter range (see Livestock Grazing).

WL-42

Deer and Elk Habitat: Manage crucial and high value deer and/or elk summer range (105,636 acres) within the Bookcliffs and La Sal Wildlife Management Unit by applying a timing limitation stipulation that will preclude surface-disturbing activities from May 15 to June 30 (see Appendix A; see Map 33).

WL-43

Deer and Elk Habitat: All forage on acquired state lands in upper Castle Valley within crucial deer winter range will be allocated to deer.

WL-44

Deer and Elk Habitat: Protect deer and/or elk crucial winter habitat (349,955 acres) by applying a timing limitation stipulation for oil and gas leasing as well as other surface-disturbing

activities (see Appendix A). (This includes 73,160 acres in WSAs, which are already closed to leasing.) This limitation will preclude surface-disturbing activities from November 15 through April 15.

WL-45

Allotments not available for grazing to benefit wildlife:

- Bogart with 14,751 acres and 209 AUMs
- Cottonwood with 27,193 acres and 900 AUMs
- Diamond with 19,112 acres and 588 AUMs
- Ida Gulch with 3,624 acres and 112 AUMs
- Pear Park with 14,202 acres
- Mill Creek with 3,922 acres and 137 AUMs
- Portions of Professor Valley along Highway 128

WOODLANDS (FOR)

Goals and Objectives:

Manage forests and woodlands for healthy conditions that contribute to healthy habitat for animal and plant species, proper watershed functioning conditions, and riparian restoration and enhancement.

Provide woodland products on a sustainable basis consistent with maintaining ecosystem health and other resource management objectives to meet local needs where such use does not limit the accomplishment of goals for the management of other important resources.

Encourage, where feasible, the harvest of forest products in areas of proposed or existing vegetation treatments to lessen the need for additional treatment or land disturbance, and in areas that need restoration for ecological benefits.

Identify, maintain, and restore forests with late successional characteristics to a pre-fire suppression condition. The MFO will adopt the USFS old-growth definitions and identification standards as per the USFS document "Characteristics of Old-Growth Forests in the Intermountain Region (April 1993)." In instances where the area of application in the previous document does not apply (e.g., *Pinus edulis*), use the document "Recommended Old-Growth Definitions and Descriptions, USDA Forest Service Southwestern Region (Sept. 1992)."

Management Decisions:

FOR-1

Permits for harvest of woodland products will continue to be sold to the public, consistent with the availability of woodland products and the protection of sensitive resource values.

FOR-2

As needed, designate private and commercial wood gathering areas for the following uses:

- Firewood
- Fence posts
- Christmas tree cutting
- Green wood cutting
- Plant gathering for landscaping

FOR-3

Use woodland harvest to assist in managing woodlands to accomplish goals outlined in the Fire Management Plan.

FOR-4

Prohibit public fuel wood gathering in riparian areas.

FOR-5

Permit sustainable harvest (including cutting of green willows, squawbush, and cottonwoods) for Native American traditional ceremonial use. Additional areas may be closed to wood gathering and wood harvest as needed to protect sensitive resources.

FOR-6

Follow national BLM Forest Health and Forest Management Standards and Guidelines to assess conditions and guide management actions for the forest and woodland resource.

FOR-7

Provide for salvage harvest of wood in beetle-kill areas, when compatible with other resource objectives.

FOR-8

Provide 1,168,988 acres for woodland harvest and wood gathering. See Map 34 for areas in which woodland harvest and wood gathering is prohibited (652,386 acres) to protect resource values.

REFERENCES

- BLM. 1982. Management Situation Analysis for the Grand Resource Area. Bureau of Land Management, Grand Resource Area, Moab District, Moab, Utah.
- BLM. 1985a. Grand Resource Area Resource Management Plan. Bureau of Land Management, Moab District, Moab, Utah.
- BLM. 1986a. Statewide Desert Bighorn Sheep Management Plan. Bureau of Land Management, Utah State Office, Salt Lake City.
- BLM. 1989b. Planning Criteria for Land Tenure Adjustments, Exchanges, Acquisitions, and Disposals: An Amendment to the 1985 Grand Resource Area Resource Management Plan. Bureau of Land Management. Moab District, Moab, Utah. February.
- BLM. 1990. Utah BLM Statewide Wilderness Environmental Impact Statement. Bureau of Land Management, Utah State Office, Salt Lake City.
- BLM. 1991a. Final Environmental Impact Statement: Vegetation Treatment on BLM Lands in Thirteen Western States. BLM-WY-91-022-4320. Bureau of Land Management, Wyoming State Office, Cheyenne. May.
- BLM. 1991c. Utah Statewide Wilderness Study Report. Bureau of Land Management, Utah State Office, Salt Lake City. October.
- BLM. 1992a. Environmental Assessment: Utah's Colorado Riverway Recreation Area Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 1993b. Bighorn Sheep Rangeland Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 1993d. Greater Sagers Wash Watershed Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 1994a. Sand Flats Recreation Area Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 1995. Interim Management Policy for Lands Under Wilderness Review. BLM Handbook H-8550-1. Bureau of Land Management, California State Office, Sacramento.
- BLM. 1997a. Standards for Rangeland Health and Guidelines for Grazing Management of BLM Lands in Utah. BLM-UT-GI-97-001-4000. Bureau of Land Management, Utah State Office, Salt Lake City. May.
- BLM. 1997b. Environmental Impact Statement for Lisbon Valley Copper Project, San Juan County, Utah. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 1999. Utah Wilderness Inventory. Bureau of Land Management, Utah State Office, Salt Lake City.
- BLM. 2001a. Colorado Riverway Special Recreation Area Management Plan Amendment. EA # UT-062-99-151. Bureau of Land Management, Moab Field Office, Moab, Utah.

- BLM. 2001b. Mill Creek Canyon Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2001c. Questar, Williams and Kern River Pipeline Draft Environmental Impact Statement. State # 01-533. Bureau of Land Management, Utah State Office, Salt Lake City.
- BLM. 2001d. Biological Soil Crusts: Ecology and Management. TR 1730-2. Bureau of Land Management, National Science and Technology Center, Denver.
- BLM. 2002a. Preparation Plan for the Moab Field Office Resource Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2002b. Standards for Public Land Health and Guidelines for Recreation Management for BLM Lands in Utah [online publication]. Bureau of Land Management, Utah State Office, Salt Lake City. [Last Accessed June 15, 2007]. Available at <http://www.ut.blm.gov/Recreation/recstandards.html>.
- BLM. 2003a. Resource Management Plan and Environmental Impact Statement for the Colorado Canyons National Conservation Area and Black Ridge Canyons Wilderness. Bureau of Land Management, Grand Junction Field Office, Grand Junction, Colorado.
- BLM. 2003b. Canyon Rims Recreation Area Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2003c. Moab Field Office Visual Resource Inventory Map. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2004b. Three Rivers Withdrawal. Bureau of Land Management, Moab Field Office, Moab, Utah and Price Field Office, Price, Utah.
- BLM. 2004c. National Sage-grouse Habitat Conservation Strategy. Bureau of Land Management, Washington, D.C. November.
- BLM. 2004d. Moab Field Office Analysis of Management Situation. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2004e. Moab Field Office Social and Economic Baseline Study. Bureau of Land Management, Moab Field Office, Moab, Utah. April.
- BLM. 2004f. Relevance and Importance Evaluations of Area of Critical Environmental Concern (ACEC) Nominations. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2004g. Wild and Scenic Rivers Review Eligibility Determination, Moab Field Office. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2005a. Land Use Planning Handbook. BLM Handbook H-1601-1. Bureau of Land Management, Washington, D.C.
- BLM. 2005b. Cameo Cliffs Special Recreation Management Area Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.

- BLM. 2005c. Utah Land Use Plan Amendment for Fire and Fuels Management, September. UT-USO-04-01 [online publication]. Bureau of Land Management, Utah State Office, Salt Lake City. [Last Accessed June 15, 2007]. Available at <http://www.ut.blm.gov/fireplanning/LUPEAFire92605FINAL.pdf>
- BLM. 2005d. Final Programmatic Environmental Impact Statement for Implementation of a Wind Energy Development Program and Associated Land Use Plan Amendments. Bureau of Land Management, Washington, D.C. June.
- BLM. 2005e. Mineral Potential Report for the Moab Planning Area, Grand and San Juan Counties, Utah. Bureau of Land Management, Moab Field Office, Moab, Utah. August.
- BLM. 2005f. Reasonable Foreseeable Development Scenario for Oil and Gas. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2005i. Summary Data for Bureau of Land Management. Appendix D in Recreational Fee Demonstration Program Annual Report, FY 2003. Department of the Interior and Department of Agriculture, Washington, D.C.
- BLM. 2006a. Normal Year Fire Rehabilitation and Stabilization Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM. 2006b. Moab Fire District Fire Management Plan. Bureau of Land Management, Moab Field Office, Moab, Utah.
- BLM 2007. Final Vegetation Treatments on BLM Lands in 17 Western States Programmatic Environmental Impact Statement and Associated Record of Decision. USDI BLM. FES 07-21.
- BLM 2007b. Final Vegetation Treatments on BLM Lands in 17 Western States Programmatic Environmental Report. USDI BLM. FES 0721.
- Connelly, John W., Michael A. Schroeder, Alan R. Sands, and Clait E. Braun. 2000. Guidelines to Manage Sage Grouse Populations and Their Habitats. *Wildlife Society Bulletin* 28(4): 967–985.
- Connelly, John W., Steven T. Knick, Michael A. Schroeder, and San J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies, Cheyenne, Wyoming.
- Cowardin, L. W., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C.
- CRCT Task Force. 2001. Conservation agreement and strategy for Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*) in the States of Colorado, Utah, and Wyoming. Colorado Division of Wildlife, Fort Collins.
- DOE. 2005. Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement. DOE/EIS-0355. Department of Energy, Office of Environmental Management, Grand Junction, Colorado.

- Department of Energy and Bureau of Land Management (DOE and BLM). 2006. West-wide Energy Corridor Programmatic EIS Information Center: "Programmatic Environmental Impact Statement for Designation of Energy Corridors on Federal Land in 11 Western States." DOE/EIS-0386 [internet website]. Department of Energy and Bureau of Land Management, Washington, D.C. [Last Accessed June 15, 2007]. Available at <http://corridoreis.anl.gov/index.cfm>.
- Edwards, T. C., Jr., C. G. Homer, S. D. Bassett, A. Falconer, R. D. Ramsey, and D. W. Wight. 1995. Utah Gap Analysis: An Environmental Information System. Final Project Report 95-1. Utah Cooperative Fish and Wildlife Research Unit, Utah State University, Logan.
- Grand County. 2004. Grand County General Plan Update. Prepared by Grand County, Moab, Utah.
- Gunnison Sage-grouse Rangewide Steering Committee (GSRSC). 2005. Gunnison Sage-grouse Rangewide Conservation Plan. Colorado Division of Wildlife, Denver. April.
- Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing Owl (*Speotyto cunicularia*). In *The Birds of North America*, No. 61, edited by A. Poole and F. Gill. Philadelphia: The Academy of Natural Sciences, and Washington, D.C.: The American Ornithologists' Union.
- Lentsch, L., and Y. Converse. 1997. Conservation Agreement and Strategy for Colorado River Cutthroat Trout (*Oncorhynchus clarki pleuriticus*) in the State of Utah. Publication Number 97-20. Utah Division of Wildlife Resources, Salt Lake City.
- Lowry Jr., J. H., R. D. Ramsey, K. Boykin, D. Bradford, P. Comer, S. Falzarano, W. Kepner, J. Kirby, L. Langs, J. Prior-Magee, G. Manis, L. O'Brien, T. Sajwaj, K. A. Thomas, W. Rieth, S. Schrader, D. Schrupp, K. Schulz, B. Thompson, C. Velasquez, C. Wallace, E. Waller and B. Wolk. 2005. Southwest Regional Gap Analysis Project: Final Report on Land Cover Mapping Methods. RS/GIS Laboratory, Utah State University, Logan.
- National Park Service (NPS). 1974. Canyonlands National Park General Management Plan. National Park Service, Canyonlands National Park, Moab, Utah.
- NPS. 1979. Wild and Scenic River Study Final Environmental Statement, Colorado and Lower Dolores Wild and Scenic Rivers. National Park Service, Denver Service Center, Denver, Colorado. September.
- NPS. 1989. General Management Plan, Development Concept Plan: Arches National Park, Utah. National Park Service, Arches National Park, Moab, Utah.
- NPS. 1995. Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan. National Park Service, Canyonlands National Park, Moab, Utah.
- NPS. 2003. Canyonlands National Park Long-range Interpretive Plan. National Park Service, Canyonlands National Park, Moab, Utah.
- NPS. 2006. Superintendent's Orders Established for Canyonlands National Park. Compendium on 36 CFR 1.7(b). National Park Service, Canyonlands National Park, Moab, Utah.

- Natural Resources Conservation Service (NRCS). 1981. Soil Survey of Grand County, Utah. U.S. Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.
- Parrish, J. R., F. P. Howe, and R. Norvell. 2002. The Utah avian conservation strategy, version 2.0. UDWR Publication No. 02-27. Utah Partners in Flight Program, Utah Division of Wildlife Resources, Salt Lake City.
- Romin, L. A., and J. A. Muck. 2002. Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances. U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City.
- San Juan County. 1996. San Juan County Master Plan. Prepared by San Juan County, Monticello, Utah.
- Sogge, M. K., R. M. Marshall, S. J. Sferra, and T. J. Tibbitts. 1997. A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol. Technical Report NPS/NAUCPRS/NRTR-97/12. U.S. Geological Survey Biological Resources Division, Colorado Plateau Field Station, Northern Arizona University, Flagstaff.
- Stiver, S. J., A. D. Apa, J. R. Bohne, S. D. Bunnell, P. A. Deibert, S. C. Gardner, M. A. Hilliard, C. W. McCarthy, and M. A. Schroeder. 2006. Greater Sage-grouse Comprehensive Conservation Strategy. Western Association of Fish and Wildlife Agencies, Cheyenne, Wyoming. December.
- USDA, Forest Service (USFS). 1986. Land and Resource Management Plan, Manti-La Sal National Forest. USDA Forest Service, Manti-La Sal National Forest, Price, Utah.
- USFS, BLM, and NPS. 1996. Wild and Scenic River Review in the State of Utah, Process and Criteria for Interagency Use. Available at Bureau of Land Management, Utah State Office, Salt Lake City.
- U.S. Fish and Wildlife Service (USFWS). 1983. Northern States Bald Eagle Recovery Plan. U.S. Fish and Wildlife Service, Denver.
- USFWS. 1987. Environmental Assessment for the Upper Colorado River Endangered Fish Recovery Program. U.S. Fish and Wildlife Service, Upper Colorado River Endangered Fish Recovery Program, Lakewood, Colorado.
- USFWS. 1988. Black-footed Ferret Recovery Plan. U.S. Fish and Wildlife Service, Denver.
- USFWS. 1990a. Humpback Chub (*Gila cypha*) Recovery Plan, 2nd Revised. U.S. Fish and Wildlife Service, Denver.
- USFWS. 1990b. Bonytail Chub Recovery Plan. Prepared by the Colorado River Fishes Recovery Team, Denver. Prepared for Region 6, U.S. Fish and Wildlife Service, Washington, D.C.
- USFWS. 1991. Colorado Pikeminnow Recovery Plan. Prepared by the Colorado River Fishes Recovery Team, Denver. Prepared for Region 6, U.S. Fish and Wildlife Service, Washington, D.C.

- USFWS. 1995. Mexican Spotted Owl (*Strix occidentalis lucida*) Recovery Plan. U.S. Fish and Wildlife Service, Denver.
- USFWS. 1999. Razorback Sucker Recovery Plan. Prepared by the Colorado River Fishes Recovery Team, Denver. Prepared for Region 6, U.S. Fish and Wildlife Service, Washington, D.C.
- USFWS. 2002a. Colorado Pikeminnow (*Ptychocheilus lucius*) Recovery Plan (Amendment and Supplement for Recovery Goals), Final Revision 2. U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City.
- USFWS. 2002b. Humpback Chub (*Gila cypha*) Recovery Goals: amendment and supplement to the Humpback Chub Recovery Plan. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- USFWS. 2002c. Bonytail (*Gila elegans*) Recovery Goals, Amendment and Supplement to the Bonytail Chub Recovery Plan, Final Revision 2. U.S. Fish and Wildlife Service, Denver.
- USFWS. 2002d. Razorback Sucker (*Xyrauchen fexanus*) Recovery Plan, Amendment and Supplement for Recovery Goals, Final Revision 1. U.S. Fish and Wildlife Service, Denver.
- USFWS. 2002e. Final Recovery Plan for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*). U.S. Fish and Wildlife Service, Albuquerque.
- USFWS. 2002f. Birds of Conservation Concern, 2002. U.S. Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia.
- USFWS. 2005. Designation of Critical Habitat for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*). U.S. Fish and Wildlife Service, Washington, D.C.
- U.S. Geological Survey (USGS), 2007. Environmental Effects of Off-Highway Vehicles on Bureau of Land Management Lands: A Literature Synthesis, Annotated Bibliographies, Extensive Bibliographies and Internet Resources.
- UDEQ. 2002. Utah's 2002 303(d) List of Waters. Utah Department of Environmental Quality, Salt Lake City.
- Utah Division of Air Quality and Environmental Protection Agency (UDAQ and EPA). 2006. US EPA Air Data Mapping and Emissions Tool, Nonattainment Areas Maps for Utah [online database]. Utah Division of Air Quality, Salt Lake City. [Last Accessed June 18, 2007]. Available at <http://www.airmonitoring.utah.gov/> and <http://www.epa.gov/air/data/nonat.html?st%7EUT%7EUtah>.
- Utah Division of Water Resources (UDWRe). 2000. Utah State Water Plan, Southeast Colorado River Basin. Utah Division of Water Resources, Salt Lake City.
- Utah Division of Water Rights (UDWRi). 2003. Water Use Records Application [application download]. Utah Division of Water Rights, Salt Lake City. [Last Accessed June 18, 2007]. Available at <http://waterrights.utah.gov/cgi-bin/wuseview.exe>.

- Utah Division of Wildlife Resources (UDWR). 1985a. Cisco Desert Habitat Management Plan. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 1985b. Hatch Point Habitat Management Plan. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 1985c. Dolores Triangle Habitat Management Plan. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 1986. The Potash-Confluence Habitat Management Plan. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 1999. Statewide Management Plan for Bighorn Sheep. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 2000a. Utah Upland Game Annual Report, 1999. Publication 00-27. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 2000b. Utah Black Bear Management Plan. Publication 00-23. Utah Division of Wildlife Resources, Salt Lake City. June 27.
- UDWR. 2002. Strategic Management Plan for Sage-grouse. Publication 02-20. Utah Division of Wildlife Resources, Salt Lake City. June.
- UDWR. 2005a. Utah Comprehensive Wildlife Conservation Strategy. Publication Number 05-19. Utah Division of Wildlife Resources, Salt Lake City. September.
- UDWR. 2005b. Utah Sensitive Species List. Unpublished document, Utah Division of Wildlife Resources, Salt Lake City.
- UDWR. 2006. Utah Big Game Annual Report, 2005. Publication 06-21. Utah Division of Wildlife Resources, Salt Lake City.
- UDWR, 2007. Aerial Survey Counts (Pronghorn). Utah Division of Wildlife Resources. Salt Lake City.
- UDWR, 2007. Utah Bighorn Sheep State-wide Management Plan. Utah Division of Wildlife Resources. Salt Lake City.
- UDWR, 2008. 2008 Antlerless Deer Permit Summary and Recommendations. Utah Division of Wildlife Resources. Salt Lake City.
- UDWR, 2008. 2008 Antlerless Elk Permit Summary and Recommendations. Utah Division of Wildlife Resources. Salt Lake City.

GLOSSARY

Activity Plan: Site-specific plan which precedes actual development. This is the most detailed level of BLM planning.

All-Terrain Vehicle (ATV): A wheeled or tracked vehicle, other than a snowmobile or work vehicle, designed primarily for recreational use or for the transportation of property or equipment exclusively on undeveloped road rights of way, open country or other unprepared surfaces.

Allotment: An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other federally managed, state owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Animal Unit Month (AUM): A standardized measurement of the amount of forage necessary for the sustenance of one cow unit or its equivalent for 1 month. Approximately 800 pounds of forage.

Area of Critical Environmental Concern (ACEC): Areas within the public lands where special management attention is required to: (1) protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or (2) protect life and safety from natural hazards.

Authorized Officer: The Federal employee who has the delegated authority to make a specific decision.

Avoidance Areas: Areas with sensitive resource values where rights-of-way leases, and easements would be strongly discouraged. Authorization made in avoidance areas would have to be compatible with the purpose for which the area was designated and not is otherwise feasible on lands outside the avoidance area.

Best Management Practices (BMPs): A suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes. Best management practices are often developed in conjunction with land use plans, but they are not considered a land use plan decision unless the land use plan specifies that they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory.

Big Game: Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

Candidate Species: Any species included in the Federal Register notice of review that are being considered for listing as threatened or endangered by the U.S. Fish and Wildlife Service.

Casual Use: Mining activities that only negligibly disturb federal lands and resources. Casual use generally includes the collecting of geochemical, rock, soil, or mineral specimens using hand tools, hand panning, and non-motorized sluicing. It also generally includes use of metal detectors, gold spears, and other battery-operated devices for sensing the presence of minerals, and hand battery-operated dry washers. Casual use does not include use of mechanized earth-moving equipment, truck-mounted drilling equipment, suction dredges, motorized vehicles in areas designated as closed to off-road vehicles, chemicals, or explosives. It also does not include occupancy or operations where the cumulative effects of the activities result in more than negligible disturbance.

Closed: Generally denotes that an area is not available for a particular use or uses; refer to specific definitions found in law, regulations, or policy guidance for application to individual programs.

Code of Federal Regulations (CFR): The official, legal tabulation or regulations directing federal government activities.

Conditions of Approval: Conditions or provisions (requirements) under which an Application for a Permit to Drill or a Sundry Notice is approved.

Conformance: That a proposed action shall be specifically provided for in the land use plan or, if not specifically mentioned, shall be clearly consistent with the goals, objectives, or standards of the approved land use plan.

Conservation Agreement: A formal signed agreement between the U.S. Fish and Wildlife Service or National Marine Fisheries Service and other parties that implements specific actions, activities, or programs designed to eliminate or reduce threats or otherwise improve the status of a species. CA's can be developed at a State, regional, or national level and generally include multiple agencies at both the State and Federal level, as well as tribes. Depending on the types of commitments the BLM makes in a CA and the level of signatory authority, plan revisions or amendments may be required prior to signing the CA, or subsequently in order to implement the CA.

Conservation Strategy: A Strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threats. Conservation strategies are generally developed for species of plants and animals that are designated as BLM Sensitive species or that have been determined by the Fish and Wildlife Service or National Marine Fisheries Service to be Federal candidates under the Endangered Species Act.

Contiguous: Lands or legal subdivisions having a common boundary; lands having only a common corner are not contiguous.

Cooperating Agency: Assists the lead Federal agency in developing an Environmental Analysis or Environmental Impact Statement. The Council on Environmental Quality regulations implementing NEPA defines a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA. Any tribe of Federal, State, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

Corridor: A wide strip of land within which a proposed linear facility could be located.

Council on Environmental Quality (CEQ): An advisory council to the President of the United States established by the national Environmental Policy Act of 1969. It reviews Federal programs for their effect on the environment, conducts environmental studies, and advises the president on environmental matters.

Critical Habitat (for listed species): Consists of 1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, on which are found those physical or biological features (constituent elements) a) essential to the conservation of the species and b) which may require

special management considerations or protection; and 2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act upon a determination by the Secretary that such areas are essential for the conservation of the species. Designated critical habitats are described in 50 CFR§ 17 and 226.

Crucial Habitat: Habitat on which a species depends for survival because there are no alternative ranges or habitats available.

Crucial Winter Habitat (Range): Parts of the habitat necessary to sustain a wildlife population at critical periods of its life cycle. This is often a limiting factor on the populations, such as breeding habitat, winter habitat, etc.

Cryptobiotic (Cryptogammic) Soils: Biological communities that form a surface layer or crust on some soils. These communities consist of cyanobacteria (blue-green bacteria), micro fungi, mosses, lichens, and green algae and perform many important functions, including fixing nitrogen and carbon, maintaining soil surface stability, and preventing erosion. Crypto biotic crusts also influence the nutrient levels of soils and the status and germination of plants in the desert. These crusts are slow to recover after severe disturbance, requiring 40 years of more to recolonize even small areas.

Cultural Resources: Nonrenewable elements of the physical and human environment including archeological remains (evidence of prehistoric or historic human activities) and sociocultural values traditionally held by ethnic groups (sacred places, traditionally utilized raw materials, etc.).

Cultural Site: Any location that includes prehistoric and/or historic evidence of human use or that has important sociocultural value.

Cumulative Impact: The impact on the environment that results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Current Habitat: habitat currently occupied by a species during the development of the plan.

Desired Condition: Description of those factors, which should exist within ecosystems both to maintain their survival and to meet social and economic needs.

Discretionary Closure: Those lands where the BLM has determined that fluid minerals leasing, even with the most restrictive stipulations, would not adequately protect other resources, values, or land uses.

Dispersed/Extensive Recreation: Recreation activities of an unstructured type, which are not confined to specific locations such as recreation sites. Example of these activities may be hunting, fishing, off-road vehicle use, hiking, and sightseeing.

Disturbance Area: Area of influence around a disturbance causing a change in animal behavior such as: leaving the area, increased stress, abandoning young, not breeding, and aberrant behavior.

Drought: Drought is a protracted period of deficient precipitation resulting in extensive damage to crops, resulting in loss of yield.

Easement: A right afforded a person or agency to make limited use of another's real property for access or other purposes.

Endangered Species: A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the Endangered Species Act.

Environmental Assessment (EA): A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

Environmental Impact Statement (EIS): A detailed written statement required by the National Environmental Policy Act when an agency proposes a major federal action significantly affecting the quality of the human environment.

Erosion: The wearing away of the land surface by running water, wind, ice, or other geological agents.

Exclusion Area: Areas with sensitive resource values where rights-of-way , leases, and easements would not be authorized.

Extensive Recreation Management Area (ERMA): An area where significant recreation opportunities and problems are limited and explicit recreation management is not required. Minimal management actions related to the BLM's stewardship responsibilities are adequate in these areas.

Fawning Habitat: an area where big game animals usually give birth during a specific time of year.

Federal Land Policy and Management Act of 1976 (FLPMA): Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

Federal Register: A daily publication, which reports Presidential and Federal Agency documents.

Fire Management Plan: A strategic plan that defines a program to manage wild land and prescribed fires and documents the fire management program in the approved land use plan; the plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

Floodplain: The relatively flat area or lowlands adjoining a body of standing or flowing water, which has been or might be covered by floodwater.

Fluid Minerals: Oil and gas resources.

Focus Area: A recreation management zone that emphasizes particular types of recreation activities.

Fossil: Mineralized or petrified form from a past geologic age, especially from previously living things.

Geographic Information System (GIS): A computer system capable of storing, analyzing, and displaying data and describing places on the earth's surface.

Goal: A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established time frames for achievement.

Grandfather (to): To exempt groups or individuals from provisions of laws or regulations because of preexisting conditions, such as exempting mining operations existing before new mining regulations are implemented from provisions of those new regulations.

Grazing System: The manipulation of livestock grazing to accomplish a desired result.

Guidelines: Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as best management practices. Guidelines may be identified during the land use planning process, but they are not considered a land use plan decision unless the plan specifies that they are mandatory.

Habitat: A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space.

Habitat Fragmentation: The disruption (by division) of extensive habitats into smaller habitat patches. The effects of habitat fragmentation include loss of habitat area and the creation of smaller, more isolated patches of remaining habitat.

Historic Habitat: habitat occupied by a species prior to the development of this plan.

Impact: A modification of the existing environment caused by an action. These environmental consequences are the scientific and analytical basis for comparison of alternatives. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

Implementation Decisions: Decisions that take action to implement land use plan decisions. They are generally appealable to Interior Board of Land Appeals.

Implementation Plan: A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with "activity" plans. Examples of implementation plans include interdisciplinary management plans, habitat management plans, and allotment management plans.

Indian Tribe: Any Indian group in the conterminous United States that the Secretary of the Interior recognizes as possessing tribal status.

Interdisciplinary Team: A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembles to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more disciplines or BLM program interests.

Lambing Habitat: An area where bighorn sheep deliver and nurse young during a specific time of year.

Land Use Allocation: The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

Land Use Plan: A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process, regardless of the scale at which the decisions were developed.

Land Use Plan Decision: Establishes desired outcomes and the actions needed to achieve them. Decisions are reached using the BLM planning process. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.

Leasable Minerals: Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. They include coal, phosphate, sulphur, potassium, and sodium minerals, and oil, gas, and geothermal.

Lease: (1) A legal document that conveys to an operator the right to drill for oil, gas; (2) the tract of land, on which a lease has been obtained, where producing wells and production equipment are located.

Lease Notice: Provides more detailed information concerning limitations that already exist in law, lease terms, regulations, and operational orders. A Lease Notice also addresses special items the lessee would consider when planning operations, but does not impose new or additional restrictions.

Lease Stipulation: A modification of the terms and conditions on a standard lease form at the time of the lease sale.

Lek: An assembly area where birds, especially sage grouse, carry on display and courtship behavior.

Limited Roads and Trails Designation: Designated areas where the use of off-road vehicles is subject to restrictions, such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions), and limiting all use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

Locatable Minerals: Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

Management Decision: A decision made by the BLM to manage public lands. Management decisions are made on both land use plan decisions and implementation decisions.

Management Opportunities: A component of the analysis of the management situation; actions or management directions that could be taken to resolve issues or management concerns.

Mechanized Travel: Travel by use of a machine, either motorized or non-motorized.

Mineral Entry: The filing of a claim on public land to obtain the right to any minerals it may contain.

Mineral Estate: The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

Mineral Materials: Materials such as common varieties of sand, stone, building stone, gravel, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended. These are also called salable minerals.

Mineral Reserves: Known mineral deposits that are recoverable under present conditions but are as yet undeveloped.

Mineral Withdrawal: A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims) and development.

Mining Claim: A parcel of land that a miner takes and holds for mining purposes, having acquired the right of possession by complying with the Mining Law of 1872, as amended, and local laws and rules. A single mining claim may contain as many adjoining locations as the locator may make or buy.

Mitigation Measures: Methods or procedures that reduce or lessen the impacts of an action.

Multiple Use: The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the lands for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some lands for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long term needs of future generations for renewable and nonrenewable resources, including but not limited to, recreation, range, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or greatest unit output.

National Environmental Policy Act of 1969 (NEPA): An act that encourages productive and enjoyable harmony between man and his environment and promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; enriches the understanding or the ecological systems and natural resources important to the Nation, and establishes the Council on Environmental Quality.

National Wild and Scenic Rivers System: A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three river classifications: (1) recreation-rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines

and may have undergone some impoundments or diversion in the past, (2) scenic-rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild-rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

Neotropical Migratory Birds: Birds that travel to Central America, South America, the Caribbean, and Mexico during the fall to spend the winter and then return to the United States and Canada During the spring to breed. These birds include almost half of the bird species that breed in the United States and Canada.

No Surface Occupancy (NSO): A fluid minerals leasing constraint that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may exploit the fluid mineral resources under the leases restricted by this constraint through use of directional drilling from sites outside the area.

Non-mechanized Travel: Travel by foot or on an animal.

Non-WSA Lands with Wilderness Characteristics: Undeveloped federal land that has been inventoried and/or reviewed by a BLM interdisciplinary team and determined to possess wilderness characteristics such as those listed in section 2(c) of the Wilderness Act of 1964. These lands do not possess special management designations like WSAs or protective management measures such as the IMP.

Noxious Weeds: A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

Objective: A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

Occupied Habitat: An area occupied by a species during the development of this plan.

Open: Generally denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs.

Off-Highway Vehicle (OHV): Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any nonamphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies.

One-Hundred-Year Flood: A hydrologic event with a magnitude that has a recurrence interval of 100 years.

Open OHV Areas: Designated areas where off-road vehicles may engage in cross country travel.

Operator: Any person who has taken formal responsibility for the operations conducted on the leased lands.

Outstandingly Remarkable River Values: Values between those listed in Section 1(b) of the Wild and Scenic Rivers Act are "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values..." Other similar values, which may be considered, include botanical, hydrological, paleontological, or scientific. Professional judgment is used to determine whether values exist to an outstandingly remarkable degree.

Paleontological Resources (Fossils): The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

Paleontology: A science dealing with the life forms of past geological periods as known from fossil remains.

Plan of Development: A mandatory plan, developed by an applicant of a mining operation or construction project that specifies the techniques and measures to be used during construction and operation of all project facilities on public land. The plan is submitted for approval to the appropriate Federal agency before any construction begins.

Plan of Operations: A plan for mining exploration and development that an operation must submit to BLM for approval when more than 5 acres a year will be disturbed or when an operator plans to work in an area of critical environmental concern or a wilderness area. A plan of Operations must document in detail all actions that the operator plans to take from exploration through reclamation.

Planning Area: A geographical area, including all land ownerships, for which BLM land use and resource management plans are developed and maintained for the BLM-administered lands within that geographical area.

Planning Criteria: The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis, and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

Prescribed Fire: The introduction of fire to an area under regulated conditions for specific management purposes.

Primitive and Unconfined Recreation: Non-motorized, non-mechanized and undeveloped types of recreational activities.

Project Area: The area of land upon which an operator conducts mining operations, including the area needed for building or maintaining of roads, transmission lines, pipelines, or other means of access.

Public Land: Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the Outer Continental Shelf, and land held for the benefit of Indians, Aleuts, and Eskimos.

Quarry: An open or surface working, usually for the extraction of stone, slate, limestone, etc.

Range Development: A structure, excavation, treatment or development to rehabilitate, protect, or improve lands to advance range betterment.

Rangeland: Land used for grazing by livestock and big game animals on which vegetation is dominated by grasses, grass-like plants, forbs, or shrubs.

Raptor: Bird of prey with sharp talons and strongly curved beaks such as hawks, owls, vultures, and eagles.

Reasonably Foreseeable Development Scenario (RFD): The prediction of the type and amount of oil, gas and other mineral activity that would occur in a given area. The prediction is based on geologic factors, past history of drilling, projected demand for oil and gas, and industry interest.

Record of Decision (ROD): A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement.

Recreational River: A wild and scenic river classification that identifies those rivers are river segments that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Relict: A remnant or fragment of the vegetation of an area that remains from a former period when the vegetation was more widely distributed.

Resource Management Plan (RMP): A land use plan as prescribed by the Federal Land Policy and Management Act which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives and actions to be achieved.

Right-of-Way (ROW): A ROW grant is an authorization to use a specific piece of public land for a specific project, such as roads, pipelines, transmission lines, and renewable energy and communication sites. The grant authorizes rights and privileges for a specific use of the land for a specific period of time.

Riparian Area: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

Riparian-Functioning at Risk (FAR): Riparian-wetland areas are considered to be in functioning condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation.

Riparian-Non-Functioning (NF): Riparian-wetland areas that are clearly not providing adequate vegetation, landform, or large wood debris to dissipate stream energy associated with high flows, and thus are not reducing erosion, improving water quality, etc.

Riparian-Properly Functioning Condition (PFC): Riparian/wetland areas are in PFC when adequate vegetation, landform, or woody debris is present to: dissipate high-energy water flow, filter sediment, capture bedload, and aid floodplain development; improve floodwater retention and groundwater recharge; develop root masses that stabilize streambanks; develop diverse fluvial geomorphology (pool and channel complexes) to provide habitat for wildlife and support greater biodiversity

Rock Art: Petroglyphs or pictographs.

Route: A linear line for motorized travel.

Rutting Habitat: An area where big game species engage in breeding activities during specific times of the year.

Salable Minerals: Common variety minerals on the public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments. Also referred to as mineral materials.

Scenic Byways: Highway routes, which have roadsides or corridors of special aesthetic, cultural, or historic value. An essential part of the highway is its scenic corridor. The corridor may contain outstanding scenic vistas, unusual geologic features, or other natural elements.

Scoping: The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

Section 7 Consultation: The requirement of Section 7 of the Endangered Species Act that all federal agencies consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

Section 106 Compliance: The requirement of Section 106 of the National Historic Preservation Act that any project funded, licensed, permitted, or assisted by the Federal Government be reviewed for impacts to significant historic properties and that the State Historic Preservation Officer and the Advisory Council on Historic Preservation be allowed to comment on a project.

Sensitive Species: All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the Fish and Wildlife Service and National Marine Fisheries Service.

Significant: An effect that is analyzed in the context of the proposed action to determine the degree or magnitude of importance of the effect, whether beneficial or adverse. The degree of significance can be related to other actions with individually insignificant but cumulatively significant impacts.

Special Recreation Management Area (SRMA): Areas, which require explicit recreation management to achieve recreation objectives and provide specific recreation opportunities.

Special Status Species: Includes proposed species, listed species, and candidate species under the Endangered Species Act; State-listed species; and BLM State Director-designated sensitive species (see BLM Manual 6840-Special Status Species Policy).

Stipulations: Requirements that are part of the terms of a mineral lease. Some stipulations are standard on all Federal leases. Other stipulations may be applied to the lease at the discretion of the surface management agency to protect valuable surface resources and uses.

Surface Disturbance: activities that normally result in more than negligible disturbance to public lands and that accelerate the natural erosive process. These activities normally involve use and/or occupancy of the surface, cause disturbance to soils and vegetation, and are usually caused by motorized or mechanical actions. Surface disturbance may result from activities using earth-moving and drilling equipment; geophysical exploration; off road vehicle travel; vegetation

treatments; the use of pyrotechnics and explosives; and construction of facilities like powerlines, pipelines, oil and gas wells, recreation sites, livestock facilities, wildlife waters, or new roads. Surface disturbance is not normally caused by casual use. Activities that are not typically surface disturbing include, but are not limited to, proper livestock grazing, cross-country hiking, minimum impact filming and vehicle travel on designated routes.

Sustainability: The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time.

Threatened Species: Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the Federal Register.

Timing Limitation Stipulation: A fluid minerals leasing constraint that prohibits surface use during specified time periods to protect identified resource values. The constraint does not apply to the operation and maintenance of production facilities unless analysis demonstrates that such constraints are needed and that less stringent, project-specific constraints would be insufficient.

Undertaking: (16 USC Sec. 470w(7)) A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.

Utility Corridor: A parcel of land that has been identified by law, Secretarial order, through a land use plan or by other management decision as being the preferred location for existing and future right-of-way grants and suitable to accommodate one type of right-of-way or one or more rights-of-way which are similar, identical or compatible.

Valid Existing Rights: Valid existing rights are legal rights to use the land that were in existence prior to implementation of the decisions in the RMP. The most significant types of valid existing rights are oil and gas leases, potash and salt leases, mining claims, and right-of-way authorizations. The oil and gas leasing stipulations specified for specific areas in the RMP would not apply to existing leases. These existing leases would be subject to the specific lease stipulations that were applied under the previous land use plan. Mining claims that exist on the effective day of a withdrawal may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Laws. An existing right-of-way would only be subject to the specific terms and conditions that were applied when it was authorized even if it is located within a right-of-way exclusion or avoidance area specified under the RMP.

Vegetation Manipulation: Alteration of vegetation by using fire, plowing, or other means.

Vegetation Type: A plant community with distinguishable characteristics described by the dominant vegetation present.

Visual Resources: The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

Waiver: Permanent exemption from a lease stipulation. The stipulation no longer applies anywhere within the leasehold.

Water Quality: The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

Watershed: All lands, which are enclosed by a continuous hydrologic drainage, divide and lay upslope from a specified point on a stream.

Way: A vehicle route within a wilderness study area that was in existence and identified during the FLPMA Section 603-mandated wilderness inventory. The *Interim Management Policy for Lands under Wilderness Review (H-8550-1)* defines a way as "a trace maintained solely by the passage of vehicles which has not been improved and/or maintained by mechanical means to ensure relatively regular and continuous use." The term is also used during wilderness inventory to identify routes that are not roads. The term developed from the definition of the term "roadless" provided in the *Wilderness Inventory Handbook* (September 27, 1978), as follows: "roadless: refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road."

Wild, Scenic or Recreational River: The three classes of what is traditionally referred to as a "Wild and Scenic River." Designated river segments are classified as wild, scenic and/or recreational, but the segments cannot overlap.

Wild, and Scenic River Study: Rivers identified in Section 5 of the Wild and Scenic Rivers Act for study as potential additions to the National Wild and Scenic Rivers System. The rivers shall be studied under the provisions of Section 4 of the Wild and Scenic Rivers Act.

Wilderness Study Area: A roadless area or island of undeveloped federal land that has been inventoried and found to possess wilderness characteristics described under Title VI, Section 603 of FLPMA and Section 2C of the Wilderness Act of 1964. These characteristics are: (1) generally appears to have been affected mainly by the forces of nature, with human imprints substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres or is large enough to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value.

Wilderness: A congressionally designated area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation that is protected and managed to preserve its natural conditions as described in Section 2A of the Wilderness Act of 1964.

Wilderness Characteristics: Features of the land associated with the concept of wilderness that specifically deal with naturalness and opportunities for solitude and primitive and unconfined recreation. These characteristics may be considered in land use planning when BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance), and need (trend, risk), and are practical to manage (from IM-2003-275, Change 1, Considerations of Wilderness Characteristics in LUP, Attachment 1). Key characteristics of wilderness listed in section 2 (c) of the Wilderness Act of 1964 were used by BLM in conducting wilderness inventories. These characteristics are features of land associated with the concept of wilderness.

Wildfire: Any unwanted wild land fire.

Wildland Fire: Any nonstructural fire, other than prescribed fire, that occurs in the wild land.

Winter Range. The portion of the winter range to which a wildlife species is confined during periods of heaviest snow cover.

Withdrawal: An action that restricts the use of public lands by removing them from the operation of some or all of the public land or mining laws.

Woodland: A forest community occupied primarily by noncommercial species such as juniper, mountain mahogany, or quaking aspen groves; all western juniper forestlands are classified as woodlands, since juniper is classified as a noncommercial species.

LIST OF PREPARERS

The BLM Moab Field Office Record of Decision and Approved RMP was written and produced by a team composed of interdisciplinary resource specialists. The table below lists the name, position, and planning role of the team members associated with preparation of these documents.

List of Preparers

Name	Position	Planning Role
Jean Carson	GIS Specialist	GIS Mapping
Brent Northrup	Resource Advisor	RMP Project Manager, Minerals, Health and Safety
Pam Riddle	Wildlife Biologist	Wildlife and Fisheries, Special Status Animal Species
Bill Stevens	Planning Specialist	Wilderness, Socioeconomics, Travel
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Doug Wight	GIS Coordinator	GIS Mapping
Dave Williams	Range Conservationist	Livestock Grazing
Shelley Smith	Canyon Country District Manager	Management
Ron Bolander	Wildlife Biologist	Special Status Animal Species
Steve Madsen	Wildlife Biologist	Wildlife and Fisheries

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BLM Canyon Country District Announces Key Leadership Changes

Attachments

[Nicollee Gaddis-Wyatt](#)

[\(JPG / 105 KB\)](#)

[Jake Palma](#)

[\(JPG / 44 KB\)](#)

Nicollee Gaddis-Wyatt and Jake Palma tapped to fill

important positions within the District

Organization: Bureau of Land Management Canyon Country

BLM Office: Canyon Country District Office

Media Rachel - | 385-

Contact: Wootton rwootton@blm.gov 235-4364

Aug 11, 2022

MOAB, Utah — The Bureau of Land Management announces leadership changes within the Canyon Country District in Southeast Utah; Nicolle Gaddis-Wyatt has been selected as the incoming BLM Canyon Country District Manager and Jake Palma has been named BLM Monticello Field Manager. In these roles, Gaddis-Wyatt and Palma will make important decisions about land management, recreation, conservation, and resource use on BLM-administered public lands within Grand and San Juan counties.

“Nicollee and Jake bring strong regional experience and appreciation for public lands to their new positions,” said **BLM Utah State Director Greg Sheehan**. “I have confidence in their abilities and am grateful for their thoughtful leadership.”

As Canyon Country District Manager, Gaddis-Wyatt now oversees 3.6-million surface acres included in the BLM Moab and Monticello Field Offices. Monticello Field Manager Palma is responsible for the administration of more than 1.8 million surface acres in San Juan County, Utah.

"I appreciate living and working in such a remarkable area," said **Canyon Country District Manager Nicolle Gaddis-Wyatt**. "I look forward to continuing to strengthen relations with local government leaders, Tribal Nations, our stakeholders and the public as we work together on behalf of all Americans."

Gaddis-Wyatt began her career with the BLM in her hometown of El Centro, California in 2010. She spent almost a decade working in planning for the BLM in California and then in Las Vegas, Nevada, before coming to the BLM Monticello Field Office in a temporary assignment as acting field manager in Summer of 2018. In September of 2019, she re-joined the Canyon Country District team as the Moab Field Manager and has served in that role until her promotion. She is passionate about responsible land management and creating a supportive and welcoming environment. In her spare time, she enjoys reading, cross stitching, baking and exploring public lands with her family, including her two dogs, May and Molly.

Palma joined the BLM as the Price Field Office planning and environmental coordinator in 2015. While there he worked on complex travel management planning and prepared environmental analyses. In the summer of 2019, he moved to Monticello to serve as the Bears Ears National Monument Manager and subsequently filled-in as the Monticello Field Manager in a temporary capacity before his permanent selection to the role. Palma enjoys building relationships with BLM partners and the communities that serve as gateways to public lands. He has strong

eastern Oregon family roots in the small town of John Day and fond memories of growing up across the West in places like the redwoods of Northern California, Crater Lake, Lake Tahoe and the Wasatch Front. He continues to make memories on public lands with his wife and four children.

You can learn more about the Canyon Country District on the BLM website at www.blm.gov/office/canyon-country-district-office.

The BLM manages more than 245 million acres of public land located primarily in 12 western states, including Alaska, on behalf of the American people. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. Our mission is to sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations.



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Labyrinth Canyon Travel Planning: A New Opportunity to Solve Old Problems

Sometimes to really understand an issue, you need to take a step back and look at the bigger picture. In the Bureau of Land Management's (BLM) travel planning process, it is easy to get lost in the details: how many miles of off-road vehicle (ORV) routes will be designated in a given travel plan, which specific routes will be open or closed to motorized vehicles, has the BLM followed the spirit and the letter of the law in preparing its plan. Details definitely matter (trust us, we obsess over them), but what is really at stake is the protection of some of Utah's most iconic landscapes.

In late October, the public comment period for the Labyrinth Rims/Gemini Bridges Travel Management Plan closed. This area, wedged between the Green River and Highway 191 just north of Moab, has long been a popular destination for an array of recreational user groups. The area's unobstructed views, towering redrock cliffs, and Green River corridor provide endless opportunities for hikers, river runners, canyoneers, climbers, bikers, and campers.

However, the area has also experienced a dramatic increase in motorized recreation over the past decade. ORV noise and dust disproportionately impact other public land users as an ever-increasing number of ORVs traverse a maze of motorized vehicle routes that slice up the landscape in every direction.

This dense web of motorized routes is a result of the BLM's 2008 resource management plan, produced by the agency's Moab field office. It was one of six pushed out at the end of the George W. Bush administration.



A kayaker enjoys the quiet beauty and solitude of Labyrinth Canyon at Tidwell Bottom. © James Kay

Faster, Louder, More Intrusive

That collection of plans smothered southern and eastern Utah with 30,926 miles of ORV routes. In the 14 years since the BLM released those destructive plans, ORV use in Utah has exploded. New ORVs are faster, louder, and more capable of reaching deeper into remote areas than ever before. ORV riders have taken full advantage of these poorly-developed plans. ORVs traverse virtually every wash and linear feature that can be located on a map (and some that can't). In too many cases the damage they cause to natural and cultural resources is irreparable.

On the eastern rims of Labyrinth Canyon, ORV damage is evident. A tangle of routes crisscrosses its way over the landscape in every direction. Within the 304,000 acres of the Labyrinth Rims/Gemini Bridges Travel Management Area, there are roughly 1,200 miles of designated ORV routes. More than 94 percent of the landscape lies within a half-mile of a route, and 99.5 percent of the area is within a mile of a designated route. As a practical matter, it's nearly impossible to escape the sight and sound of ORVs.

Yet, while the eastern rims of Labyrinth Canyon are blanketed in routes, the western rims are almost completely devoid of them. The Labyrinth Canyon Wilderness, designated by Congress in 2019, may be best experienced by a float trip on the Green River. The flatwater section of the river meandering through Labyrinth Canyon is a designated Wild and Scenic River. It offers recreationists of all ages and abilities the opportunity to experience incredible scenery, cultural sites reflecting thousands of years of human history, and an unparalleled multiday float through wilderness.

But the quiet and solitude abundant along one shore is often shattered on the other by the noise and dust of ORVs racing along the riverbank, up and down side canyons, and along canyon rims. Vehicle tracks cut through riparian vegetation and spread out across the riverbanks, weaving in whatever direction riders choose.

The Moment for Change

The BLM has a unique and immensely valuable opportunity before it. The Labyrinth Rims/Gemini Bridges travel plan is one of 11 the BLM is required to rewrite as part of a 2017 settlement agreement between SUWA-led conservation organizations, the BLM, and ORV groups to resolve litigation over the Bush-era plans. These plans will determine where motorized vehicles may legally travel on more than 6 million acres of BLM-managed land. The plans must minimize ORV-damage to natural and cultural resources, wilderness values, and other public land users. They will dictate which of those 6 million acres of public land will be carved up with vehicle routes and which will be preserved.

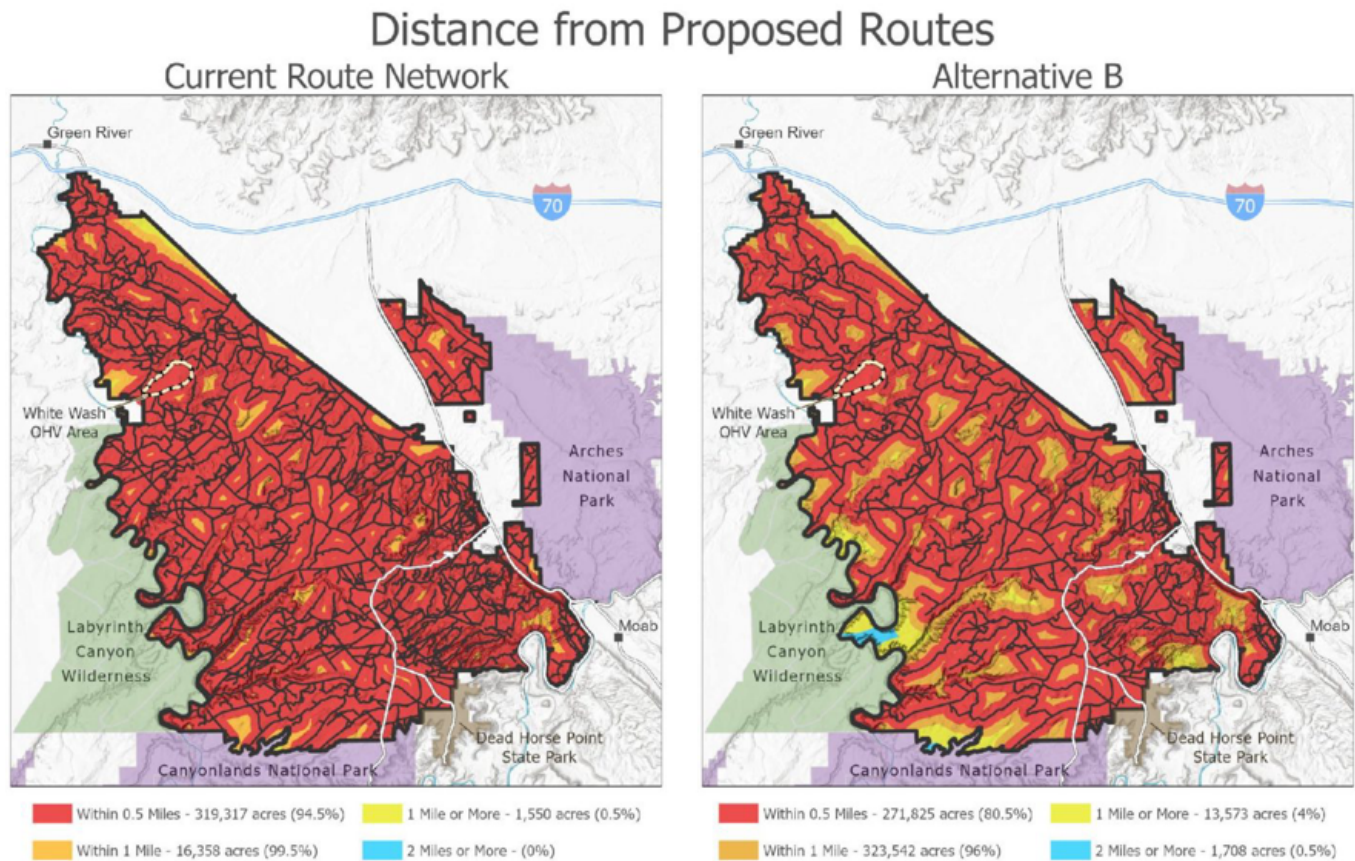
With this forthcoming travel plan, the agency has the chance to correct decades of mismanagement and harmonize land management on both sides of the Green River. The BLM has the opportunity to complete the protection of Labyrinth Canyon: to preserve for future generations a fragile and vitally important riparian ecosystem, to protect irreplaceable cultural sites, to enhance wildlife habitat, and to save remaining wilderness.

Throughout the BLM's public comment period for the Labyrinth Rims/Gemini Bridges travel plan, public land lovers called on the agency to do just that. River guides and outfitters in Moab highlighted the unique visitor experience floating this section of the Green River provides and asked the BLM to protect the canyon's solitude and serenity. River runners from around the country related their experiences floating this unique canyon, recounting the jarring sound of ORVs that can reverberate off canyon walls and travel for miles. Even the Grand County Commission (Grand County is the Utah county that encompasses the planning area) asked that the agency set Labyrinth Canyon aside for quiet, non-motorized recreation. More than 4,500 SUWA members and supporters demanded protection for this special place.

Beyond Labyrinth Canyon itself, the greater Labyrinth Rims and Gemini Bridges area suffers from the same ORV mismanagement that prioritizes motorized vehicle recreation at the expense of natural and cultural resources and other public land users. Many currently

designated routes head off in straight lines to nowhere, clear evidence that they were originally punched into the wild redrock landscape as seismic lines and built as a part of oil and gas exploration decades ago.

Other routes braid through washes or proceed haphazardly around obstacles. Some routes are lightly used and barely visible, with nature well on its way to reclamation. ORV use on many other routes in the area is causing significant and well-documented damage to cultural sites, native vegetation, riparian resources, sensitive soils, and wildlife habitat.



A Clear if Imperfect Choice

When the BLM released a draft travel plan for the Labyrinth Rims and Gemini Bridges area in September, it analyzed four alternative travel networks. Only one of those—Alternative B—would protect Labyrinth Canyon itself and make any meaningful change to ORV management throughout this special place (see map above). Alternative B would still

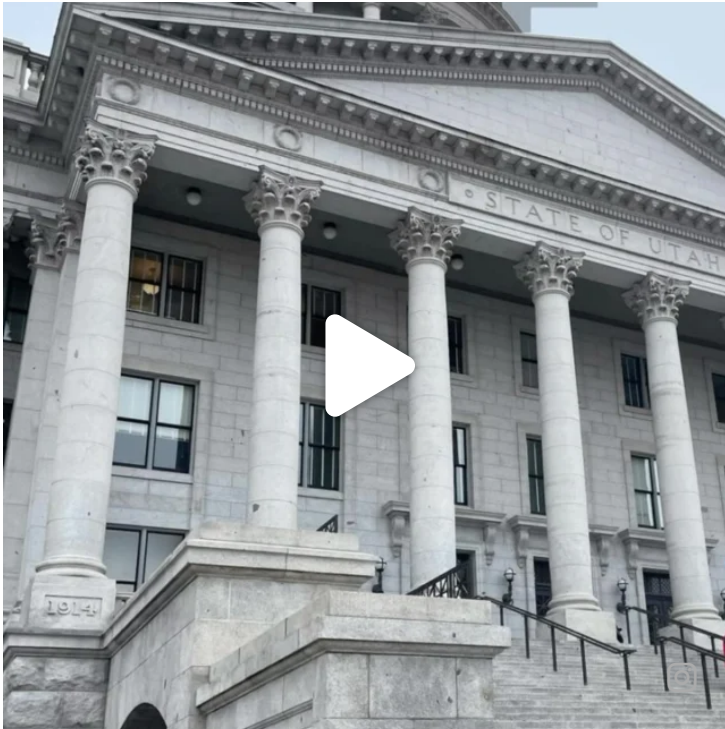
permit ORV travel on nearly 700 miles of routes such that more than 80 percent of the area would be within a half mile of a designated route. Alternative B would allow meaningful opportunities to access and experience these lands from a motorized vehicle. But it would also allow the countless hikers, river runners, climbers, canyoneers, campers, and nature lovers to experience this area away from the ubiquitous sight and sound of ORVs. It would protect precious natural resources under increasing pressure from years of drought; it would preserve cultural sites that continue to be damaged by motorized vehicles; and it would create some balance between ORV use and every other public land use.

The BLM is at a crossroads. It can perpetuate the sacrifice of the Labyrinth Rims and Gemini Bridges area to excess motorized recreation or it can take a step back, recognize what is at stake, and select Alternative B to protect this sublime landscape for decades to come. Labyrinth Canyon deserves no less.

—Kelsey Cruickshank and Laura Peterson

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K2

K2, at 8,611 metres (28,251 ft) above sea level, is the second-highest mountain on Earth, after Mount Everest at 8,849 metres (29,032 ft).^[5] It lies in the Karakoram range, partially in the Gilgit-Baltistan region of Pakistan-administered Kashmir and partially in the China-administered Trans-Karakoram Tract in the Taxkorgan Tajik Autonomous County of Xinjiang.^{[6][7][8][a]}

K2 became known as the *Savage Mountain* after George Bell—a climber on the 1953 American expedition—said, "It's a savage mountain that tries to kill you."^[9] Of the five highest mountains in the world, K2 has long been the deadliest: prior to 2021, approximately one person had died on the mountain for every four who reached the summit.^{[9][10][11]} After an increase in successful attempts, as of August 2023, an estimated 800 people have summited K2, with 96 deaths during attempted climbs.^[11]

Also occasionally known as Mount Godwin-Austen,^{[12][3][13]} other nicknames for K2 are *The King of Mountains* and *The Mountaineers' Mountain*,^[14] as well as *The Mountain of Mountains* after prominent Italian climber Reinhold Messner titled his book about K2 the same.^[15] Although the summit of Everest is at a higher altitude, K2 is a more difficult and dangerous climb, due in part to its more northern location, where inclement weather is

K2



K2 from Broad Peak Base Camp

Highest point

<u>Elevation</u>	8,611 m (28,251 ft) <u>Ranked 2nd</u>
<u>Prominence</u>	4,020 m (13,190 ft) ^[1] <u>Ranked 22nd</u>
<u>Listing</u>	<u>Eight-thousander</u> <u>Seven Second Summits</u> <u>Ultra</u>
<u>Coordinates</u>	<u>35°52′57″N 76°30′48″E</u> ^[2]

Naming

<u>Etymology</u>	Second peak measured in the <u>Karakoram Range</u> by the <u>Survey of India</u> , hence "K2"; ^{[3][4]} <i>Mount Godwin-Austen</i> derives from <u>Henry Godwin-Austen</u> , who first surveyed the peak.
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Geography

old.^[80] She paid tribute to Julie Tullis and Alison Hargreaves, two British women who summited K2, in 1986 and 1995 respectively, but died during their descents. Other notable summits included John Snorri Sigurjónsson and Dawa Gyalje Sherpa who joined his sister (Dawa Yangzum Sherpa), becoming the second set of siblings to summit K2.^[81] Both Mingma Gyalje Sherpa and Fazal Ali recorded their second K2 summits.

2018

2018 became the record year for highest number of summits in a season, at 62.^[11]

On 22 July 2018, Garrett Madison became the first American climber to reach the summit of K2 more than once when he led an international team of eight climbers, nine Nepali Sherpas, four Pakistani high-altitude porters, and two other Madison Mountaineering guides to the summit.^{[82][83]}

On 22 July 2018, Polish mountaineer and mountain runner Andrzej Bargiel became the first person to ski from summit to base camp.^[84]

2019

On 25 July 2019, Anja Blacha became the first German woman to summit K2. She climbed without the use of supplemental oxygen.^[85]

2022

On 22 July 2022, 145 summits on K2 were recorded in a single day, making it a record for the highest number of summits in a single day ever on K2. The 2022 season also saw the highest number of summits in a season at 200, taking over the previous record of 62 summits in 2018.^{[11][86]}

On 28 July 2022, Adriana Brownlee became the youngest woman to climb K2 when she summited at age 21.^[87]

2023

2023 was also a busy season like 2022, with an estimated 112 summits on the only viable weather window of July 27. Norwegian mountaineer Kristin Harila and her guide, Nepali mountaineer Tenjen Sherpa successfully completed their summit of K2 on the same day, and set a record for the fastest climb of all 14 eight-thousanders in 92 days.^[88]

Winter expeditions

- 1987/1988 — Polish-Canadian-British expedition led by Andrzej Zawada from the Pakistani side, consisting of 13 Poles, 7 Canadians and 4 Brits. 2 March Krzysztof Wielicki and Leszek Cichy established camp III at 7,300 metres (24,000 ft) above sea, followed by Roger Mear and Jean-Francois Gagnon few days later. Hurricane winds and frostbite forced the team to retreat.^[89]
- 2002/2003 — Netia K2 Polish Winter Expedition. The team of fourteen climbers was led by Krzysztof Wielicki, and included four members from Kazakhstan, Uzbekistan, and Georgia. They intended to climb North Ridge. Marcin Kaczkan, Piotr Morawski and Denis Urubko established camp IV at 7,650 metres (25,100 ft) above sea level. The final ascent started by Kaczkan and Urubko failed due to the destruction of the tent by harsh weather in camp IV and Kaczkan's cerebral edema.^[89]
- 2011/2012 — Russian expedition. Nine Russian climbers attempted K2's Abruzzi Spur route. They managed to reach 7,200 metres (23,600 ft) above sea level (Vitaly Gorelik, Valery

- Retrieved 11 July 2024.
12. "Italians Conquer World's Second Highest Peak; Mt. Godwin Austen in Kashmir Is Climbed in 76-Day Effort" (<https://web.archive.org/web/20240901042739/https://www.nytimes.com/1954/08/04/archives/italians-conquer-worlds-second-highest-peak-mt-godwin-austen-in.html>). *The New York Times*. 4 August 1954. p. 1. ISSN 0362-4331 (<https://search.worldcat.org/issn/0362-4331>). Archived from the original (<https://www.nytimes.com/1954/08/04/archives/italians-conquer-worlds-second-highest-peak-mt-godwin-austen-in.html>) on 1 September 2024. Retrieved 1 September 2024.
 13. Chhoghi, K2. "K2 Chhoghi The King of Karakoram" (<http://www.skardu.pk/k2-chhoghi-the-king-of-karakoram/>). *Skardu.pk*. Retrieved 23 November 2016.
 14. Leger, C. J. (8 February 2017). "K2: The King of Mountains" (<https://basecampmagazine.com/2017/02/08/k2-the-king-of-mountains/>). *Base Camp Magazine*. Retrieved 8 February 2017.
 15. Messner, Reinhold. "K2: Mountain of Mountains" (<https://www.goodreads.com/book/show/118521.K2>). *Goodreads*. Retrieved 8 August 2019.
 16. "EXPLAINER: K2's peak beckons the daring, but climbers rarely answer call in winter" (<https://www.dawn.com/news/1606499/explainer-k2s-peak-beckons-the-daring-but-climbers-rarely-answer-call-in-winter>). 10 February 2021.
 17. Brummit, Chris (16 December 2011). "Russian team to try winter climb of world's 2nd-highest peak" (<http://usatoday30.usatoday.com/news/world/story/2011-12-16/russian-team-winter-climb-k2-mountain/52010962/1>). *USA Today*. Associated Press. Retrieved 26 September 2015.
 18. "Nepali mountaineers achieve historic winter first on K2" (<https://web.archive.org/web/20210122011054/https://www.msn.com/en-us/news/world/nepali-mountaineers-achieve-historic-winter-first-on-k2/ar-BB1cOfjx>). National Geographic. Archived from the original (<https://www.msn.com/en-us/news/world/nepali-mountaineers-achieve-historic-winter-first-on-k2/ar-BB1cOfjx>) on 22 January 2021. Retrieved 29 January 2021.
 19. "Winter K2 Update: FIRST WINTER K2 SUMMIT!!!!" (<https://www.alanarnette.com/blog/2021/01/16/winter-k2-update-first-winter-k2-summit>). *alanarnette.com*. 16 January 2021. Retrieved 26 August 2021.
 20. "Asia, Pakistan, K2 Attempt" (<http://publications.americanalpineclub.org/articles/12198824002/Asia-Pakistan-K2-Attempt>). *The American Alpine Club*. Retrieved 8 August 2019.
 21. Curran, p. 25
 22. Curran, p. 30
 23. "Convert Roman into Urdu Script" (<http://urdu.changathi.com/>). *changathi.com*.
 24. "Place names – II" (<http://tribune.com.pk/story/243567/place-names--ii/>). *The Express Tribune*. 2 September 2011. Retrieved 4 September 2011.
 25. Carter, H. Adams (1983). "A Note on the Chinese Name for K2, "Qogir" " (<https://publications.americanalpineclub.org/articles/12198329601>). Notes. *American Alpine Journal*. **25** (57). American Alpine Club: 296. Retrieved 6 November 2016. Carter, the long-time editor of the *AAJ*, goes on to say that the name *Chogori* "has no local usage. The mountain was not prominently visible from places where local inhabitants ventured and so had no local name ... The Baltis use no other name for the peak than K2, which they pronounce 'Ketu'. I strongly recommend *against* the use of the name *Chogori* in any of its forms."
 26. Pakistan (<https://www.cia.gov/the-world-factbook/countries/pakistan/>). *The World Factbook*. Central Intelligence Agency.

www.himalayanstoveproject.org. Retrieved 13 September 2024.

79. "With Diabetes to the Top" (<https://www.diabetes-m.com/blog/news/with-diabetes-to-the-top-campaign-starts-with-a-wall-climbing-competition-for-children/>). *Diabetes:M*. 23 January 2018. Retrieved 7 January 2021.
80. Staff Reporter (16 August 2017). "Vanessa thanks Pakistan govt for help in scaling K-2" (<http://nation.com.pk/sports/16-Aug-2017/vanessa-thanks-pakistan-govt-for-help-in-scaling-k-2/>). *The Nation*. Retrieved 17 August 2017.
81. Pokhrel, Rajan. "Vanessa O'Brien, John Snorri set record as 12 scale Mt K2" (<https://thehimalayantimes.com/nepal/vanessa-obrien-john-snorri-set-record-as-12-scale-mt-k2/>). *The Himalayan Times*. Retrieved 28 July 2017.
82. "K2 2018 Summer Coverage: Record Weekend on K2 and a Death" (<http://www.alanarnette.com/blog/2018/07/23/k2-2018-summer-coverage-record-weekend-on-k2-and-a-death/>). *The Blog on alanarnette.com*. Retrieved 2 December 2018.
83. "K2 2018 Archives" (<https://madisonmountaineering.com/dispatches/k2/k2-2018/>). *Madison Mountaineering*.
84. "First Ski descent on K2" (<http://www.dreamwanderlust.com/news/first-ski-descent-on-k2/>). *dreamwanderlust.com*. 22 July 2018.
85. "K2 summiteer Anja Blacha: 'More flexible on the mountain without breathing mask' " (<https://abenteuer-berg.de/en/k2-summiteer-anja-blacha-more-flexible-on-the-mountain-without-breathing-mask/>). *Adventure Mountain*. 7 August 2019. Retrieved 14 May 2020.
86. Arnette, Alan (1 August 2023). "K2 2023 Coverage: Sherpas Dominate K2" (<https://www.alanarnette.com/blog/2023/08/01/k2-2023-coverage-sherpas-dominate-k2/>). Retrieved 11 July 2024.
87. "Adriana Brownlee: 'Russian roulette' for youngest woman to climb K2" (<https://www.bbc.co.uk/news/uk-northern-ireland-62391945>). *BBC News*. 2 August 2022. Retrieved 30 September 2024.
88. Sangay Sherpa (29 July 2023). "Tenjin Sherpa from field to summit of 14 peaks in 92 days with Kristin Harila" (<https://thehimalayantimes.com/nepal/tenjin-sherpa-from-field-to-summit-of-14-peaks-in-92-days-with-kristin-harila>). *The Himalayan Times*. Retrieved 10 August 2023.
89. "History of Winter Climbing K2" (<http://altitudepakistan.blogspot.com/2014/11/history-of-winter-climbing-k2.html>). *altitudepakistan.blogspot.com*. Retrieved 5 July 2018.
90. "Vitaly Gorelik Dies On K2 - Alpinist.com" (<http://www.alpinist.com/doc/web12w/newswire-vitaly-gorelik-dies-k2>). *www.alpinist.com*. 6 February 2012. Retrieved 5 July 2018.
91. "Climbers Set Off to Be First to Summit World's Most Notorious Mountain in Winter" (<https://web.archive.org/web/20171229155557/https://news.nationalgeographic.com/2017/12/K2-mountain-winter-climb-poland-spd/>). *nationalgeographic.com*. 29 December 2017. Archived from the original (<https://news.nationalgeographic.com/2017/12/K2-mountain-winter-climb-poland-spd/>) on 29 December 2017. Retrieved 5 July 2018.
92. "Polish Heading to K2 for First Winter Ascent Attempt" (<https://gripped.com/routes/polish-heading-k2-first-winter-ascent-attempt/>). *Gripped Magazine*. 29 December 2017. Retrieved 5 July 2018.
93. "Poland's 'ice warriors' risk life and limb to be first to summit K2 in winter" (<http://www.scmp.com/sport/other-sport/article/2102469/how-polands-ice-warriors-aim-become-first-team-summit-k2-savage>). *scmp.com*. 13 July 2017. Retrieved 5 July 2018.
94. "| CAMP" (<http://www.camp.it/blogPost.aspx?CAT=32&ID=427&T=CB>). *Camp.it*. Retrieved 10 November 2024.

Department of the Interior
Bureau of Land Management
Washington, D.C. 20240

Manual 8400 - Visual Resource Management

04/05/1984

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Glossary of Terms

Illustrations

1. Visual Resource Management System for BLM

Bibliography

.01 Purpose. This section describes the overall policy direction for Visual Resource Management (VRM) in the Bureau of Land Management (BLM).

.02 Objectives. The objective of Visual Resource Management is to manage public lands in a manner which will protect the quality of the scenic (visual) values of these lands.

.03 Authority.

A. Federal Land Policy and Management Act of 1976, 43 U.S.C. 1701 et. seq.;

1. Section 102 (a)(8). States that “...the public lands be managed in a manner that will protect the quality of the...scenic...values....”
2. Section 103 (c). Identifies “scenic values” as one of the resources for which public land should be managed.
3. Section 201 (a). States that “The Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values (including...scenic values)....”
4. Section 505 (a). Requires that “Each right-of-way shall contain terms and conditions which will... minimize damage to the scenic and esthetic values....”

B. National Environmental Policy Act of 1969, 43 U.S.C. 4321 et. seq.;

1. Section 101 (b). Requires measures be taken to “ ...assure for all American...esthetically pleasing surroundings....”
2. Section 102. Requires agencies to “Utilize a systematic, interdisciplinary approach which will ensure the integrated use of...Environmental Design Arts in the planning and decisionmaking....”

C. Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1201 et. seq.;

1. Section 102 (d). Requires that measures be taken to “ ...assure that surface coal mining operations are so conducted as to protect the environment.”

.04 Responsibility.

A. **Director:**

1. Lead responsibility for VRM functions in the Bureau is assigned to the Recreation program. This includes the development of policy, guidelines, training, and overall coordination.

2. Each program (i.e., Range, Forestry, Minerals, Lands, etc.) involved in resource development work is responsible for protecting visual values. This includes ensuring that (1) personnel in each program who are involved in activities which affect visual values are properly trained in visual management techniques; (2) visual values are adequately considered in all management activities; and (3) adequate guidance and funding is available to accomplish these purposes.

B. State Director:

1. Implements BLM policy and provides statewide program coordination and guidance for managing visual resources on public lands.
2. Provides a statewide VRM training program to maintain skill levels for personnel involved in activities which affect visual values.
3. Assigns the coordination of VRM within the State to one person and ensures that the person is properly trained.
4. Maintains at least one person within the State who has the capability and expertise to provide visual design assistance on major projects and to conduct VRM training.

C. District Manager:

1. Provides Districtwide program coordination and guidance for managing visual resources on public lands.
2. Ensures that all District personnel involved in management activities which affect visual values are properly trained in visual management techniques.
3. Provides technical assistance to Resource Area Offices on visual management applications.
4. Designates one person within the District to coordinate the VRM functions and ensures that the person is properly trained.

D. Area Manager:

1. Prepares and maintains on a continuing basis an inventory of visual values on public lands and ensures that these values are adequately considered in the land-use planning and decisionmaking processes.
2. Ensures that visual impacts are minimized in all resource development activities including non-BLM initiated projects.

3. Assigns the coordination of VRM to one person and ensures that the person is properly trained.

4. Ensures that all Resource Area personnel involved in surface disturbing activities are trained in VRM techniques. Back to Top

.05 References.

A. BLM Manual 8410.

B. BLM Manual 8431.

.06 Policy.

A. The Bureau has a basic stewardship responsibility to identify and protect visual values on public lands. The basic policy parameters for accomplishing this task are as follows:

1. The Bureau shall prepare and maintain on a continuing basis an inventory of visual values on all public lands. Priority for new inventory shall be given to those areas where it is needed for issue resolution in Resource Management Planning (RMP) or in those areas where a project is proposed and an inventory does not exist or needs updating. The goal is to have a completed VRM inventory for each RMP effort. The level of detail should vary with the relative value of the visual resources within the planning area.

2. Visual management objectives (classes) are developed through the RMP process for all Bureau lands. The approved VRM objectives shall result from, and conform with, the resource allocation decisions made in RMP's.

3. Interim visual management objectives are established where a project is proposed and there are no RMP, or Management Framework Plan (MFP) approved VRM objectives. These objectives are developed using the guidelines in Manual Section 8410 and must conform with the land use allocations set forth in the RMP which covers the project area. The establishment of interim VRM objectives will not require a plan amendment unless the project itself requires one.

4. The approved VRM objectives (classes) provide the visual management standards for the design and development of future projects and for rehabilitation of existing projects.

5. Visual design considerations shall be incorporated into all surface disturbing projects regardless of size or potential impact. Emphasis shall be placed on providing these inputs during the initial planning and design phase so as to minimize costly redesign and mitigation at later phases of project design and

development. Ensuring early visual design inputs into non-Bureau initiated projects in many cases is beyond Bureau control. However, every effort should be made to inform potential applicants of the visual management objectives so they can adequately incorporate visual design considerations into their initial planning and design efforts.

6. The contrast rating process (Manual Section 8431) is used as a visual design tool in project design and as a project assessment tool during environmental review. Contrast ratings are required for proposed projects in highly sensitive areas or high impact projects, but may also be used for other projects where it would appear to be the most effective design or assessment tool. A brief narrative visual assessment is completed for all other projects which require an environmental assessment or environmental impact statement.

7. Ensure that project monitoring efforts include timely and thorough compliance evaluations, especially during the construction phase, to ensure that visual management provisions are effectively carried out.

B. Visual Resource Management is a management responsibility shared by all resource programs (Section .04A.2).

C. VRM training shall be conducted in each District and Resource Area to maintain skill levels for VRM coordinators and project coordinators. Emphasis shall be placed on improving design skills so that visual design considerations will be incorporated into all project proposals beginning with initial planning and design.

.07 Overview of Visual Resource Management System.

A. The VRM System. Public lands have a variety of visual values. These different values warrant different levels of management. Because it is neither desirable nor practical to provide the same level of management for all visual resources, it is necessary to systematically identify and evaluate these values (Illustration 1) to determine the appropriate level of management. Visual values are identified through the VRM inventory (Manual Section 8410) and are considered with other resource values in the Resource Management Planning (RMP) process. Visual management objectives are established in RMP's in conformance with the land use allocations made in the plan. These area specific objectives provide the standards for planning, designing, and evaluating future management projects.

The contrast rating system (Manual Section 8431) provides a systematic means to evaluate proposed projects and determine whether these projects conform with the approved VRM objectives. It also provides a means to identify mitigating measures that can be taken to minimize adverse visual impacts. The VRM system, therefore, provides a means: to identify visual values; to establish objectives through the RMP process for managing these values; and to provide timely inputs into proposed surface disturbing projects to ensure that these objectives are met.

B. Use of Basic Landscape Design Principles. Assigning values to visual resources is a subjective process. The phrase, "beauty is in the eye of the beholder," is often quoted to emphasize the subjectivity in determining scenic values. Yet, researchers have found consistent levels of agreement among individuals asked to evaluate visual quality. Designers have used the basic design elements of form, line, color, and texture to describe and evaluate landscapes for hundreds of years. Modifications in a landscape which repeat the landscape's basic elements are said to be in harmony with their surroundings. Modifications which do not harmonize often look out of place and are said to contrast or stand out in unpleasing ways. These basic design elements and concepts have been incorporated into the VRM system to lend objectivity, integrity, and consistency to the process. The VRM system is designed to separate the existing landscape and the proposed project into their features and elements and to compare each part against the other in order to identify those parts which are not in harmony. Then, ways are sought to bring them back into harmony. An understanding of basic design principles and how they relate to the appearance of projects is essential in order to minimize visual impacts. The references listed in the Bibliography provide source information on environmental design concepts and techniques and their application in minimizing visual impacts. The information generated through the VRM system is to be used as a guide. The decision on the amount of visual change that is acceptable is made by the field manager.

Glossary of Terms

- A -

(a)esthetics: relates to the pleasurable characteristics of a physical environment as perceived through the five senses of sight, sound, smell, taste, and touch.

adverse visual impact: any modification in land forms, water bodies, or vegetation, or any introduction of structures, which negatively interrupts the visual character of the landscape and disrupts the harmony of the basic elements (i.e., form, line, color, and texture).

angle of observation: the angle, both vertical and horizontal, between a viewer's line of sight and the landscape being viewed.

areas of critical environmental concern (ACEC's) for scenic values: areas within the public lands where special management attention is required to protect or prevent irreparable damage to important scenic values.

- B -

background distance zone: the visible area of a landscape which lies beyond the foreground middleground. Usually from a minimum of 3 to 5 miles to a maximum of about 15 miles from a travel route, use area, or other observer point. Atmospheric conditions in some areas may limit the maximum to about 8 miles or less.

basic elements: the four design elements (form, line, color, and texture) which determine how the character of a landscape is perceived.

- C -

characteristic: a distinguishing trait, feature, or quality.

characteristic landscape: the established landscape within an area being viewed. This does not necessarily mean a naturalistic character. It could refer to an agricultural setting, an urban landscape, a primarily natural environment, or a combination of these types.

computer graphics: visual displays of information produced by an electronic computer. This includes both hard-copy and screen displays.

contrast: opposition or unlikeness of different forms, lines, colors, or textures in a landscape.

contrast rating: a method of analyzing the potential visual impacts of proposed management activities.

cultural modification: any human-caused change in the land form, water form, vegetation, or the addition of a structure which creates a visual contrast in the basic elements (form, line, color, texture) of the naturalistic character of a landscape.

- D -

distance zones: a subdivision of the landscape as viewed from an observer position. The subdivision (zones) includes foreground-middleground, background, and seldom seen.

- E -

easement, scenic: a right to make use of land to protect the scenic values.

enhancement: a management action designed to improve visual quality.

- F -

foreground-middleground distance zones: the area visible from a travel route, use area, or other observation point to a distance of 3 to 5 miles. The outer boundary of this zone is defined as the point where the texture and form of individual plants are no longer apparent in the landscape. Vegetation is apparent only in patterns or outline.

form: the mass or shape of an object or objects which appear unified, such as a vegetative opening in a forest, a cliff formation, or a water tank.

- H -

harmony: a combination of parts into a pleasing or orderly whole: congruity; a state of agreement of proportionate arrangement of form, line, color, and texture.

- I -

interdisciplinary team: a group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions.

- K -

key observation point (KOP): one or a series of points on a travel route or at a use area or a potential use area, where the view of a management activity would be most revealing.

- L -

landscape character: the arrangement of a particular landscape as formed by the variety and intensity of the landscape features and the four basic elements of form, line, color, and texture. These factors give the area a distinctive quality which distinguishes it from its immediate surroundings.

landscape features: the land and water form, vegetation, and structures which compose the characteristic landscape.

lighting:

back lighting: a situation where the light source is coming from behind the object being viewed. Objects are generally in shadow with highlighted edge

front lighting: a situation where the light source is coming from behind the observer and shining directly upon the area being viewed.

side lighting: a situation where the light source is coming from the side of a scene or object being viewed. It is usually the most critical for revealing contrast.

line: the path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or texture. Within landscapes, lines may be found as ridges, skylines, structures, changes in vegetative types, or individual trees and branches.

- M -

management activity: a surface disturbing activity undertaken on the landscape for the purpose of harvesting, traversing, transporting, protecting, changing, replenishing, or otherwise using resources.

mitigation measures: methods or procedures designed to reduce or lessen the adverse impacts caused by management activities.

multidisciplinary team: a group specialists with different backgrounds, assembled to solve a problem. The problem is broken into pieces and each specialist works on a portion of the problem. Partial solutions are then linked together to provide the final solutions.

- N -

naturalistic character: a landscape setting where the basic elements are displayed in a composition that appears unaltered by humans.

- O -

observer position: the placement and relationship of a viewer to the landscape which is being viewed.

- P -

photomontage: the technique of combining in a single photographic composition, parts of different photographs by superimposition.

physiographic province: an extensive portion of the landscape normally encompassing many hundreds of square miles, which portrays similar qualities of soil, rock, slope, and vegetation of the same geomorphic origin (Fenneman 1946, Sahrhaftig 1975).

- R -

rehabilitation: a management alternative and/or practice which restores landscapes to a desired scenic quality.

- S -

scale: the proportionate size relationship between an object and the surroundings in which the object is placed.

scenery: the aggregate of features that give character to a landscape.

scenic area: an area whose landscape character exhibits a high degree of variety and harmony among the basic elements which results in a pleasant landscape to view.

scenic quality: the relative worth of a landscape from a visual perception point of view.

scenic quality evaluation key factors: the seven factors (land form, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications) used to evaluate the scenic quality of a landscape.

scenic quality ratings: the relative scenic quality (A, B, or C) assigned a landscape by applying the scenic quality evaluation key factors; scenic quality A being the highest rating, B a moderate rating, and C the lowest rating.

scenic quality rating unit: a portion of the landscape which displays primarily homogenous visual characteristics of the basic landscape features (land and water form, vegetation, and structures).

scenic values: (refer to scenic quality and scenic quality ratings).

seen area: that portion of the landscape which is visible from roads, trails, rivers, campgrounds, communities, or other key observation positions.

seldom seen distance zone: portions of the landscape which are generally not visible from key observation points, or portions which are visible but more than 15 miles distance.

sensitivity levels: measures (e.g., high, medium, and low) of public concern for the maintenance of scenic quality.

simulation: a realistic visual portrayal which demonstrates the perceivable changes in landscape features caused by a proposed management activity. This is done through the use of photography, artwork, computer graphics, and other such techniques.

- T -

texture: the visual manifestations of the interplay of light and shadow created by the variations in the surface of an object or landscape.

- U -

use volume: the total volume of visitor use each segment of a travel route or use area receives.

- V -

variables: factors influencing visual perception including distance, angle of observation, time, size or scale, season of the year, light, and atmospheric conditions.

variety: the state or quality of being varied and having the absence of monotony or sameness.

viewshed: the landscape that can be directly seen under favorable atmospheric conditions, from a viewpoint or along a transportation corridor.

visual contrast: (see contrast).

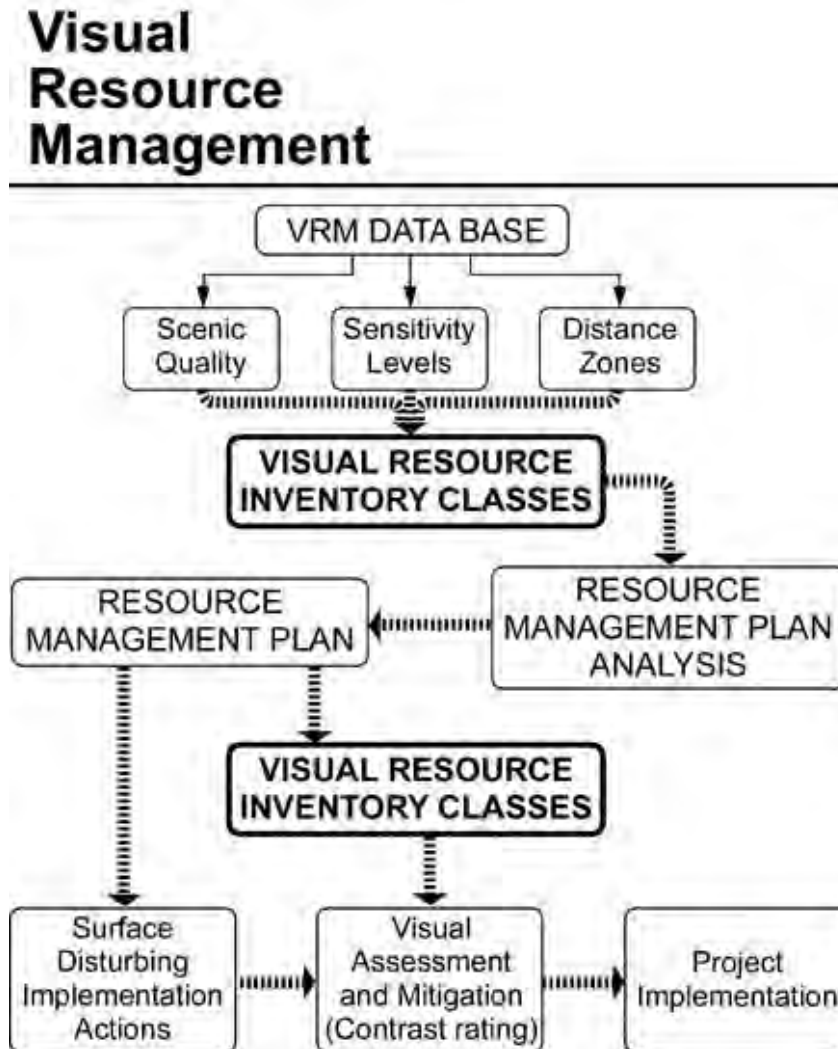
visual quality: (see scenic quality).

visual resources: the visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features).

visual resource management classes: categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes. Each class has an objective which prescribes the amount of change allowed in the characteristic landscape.

visual resource management (VRM): the inventory and planning actions taken to identify visual values and to establish objectives for managing those values; and the management actions taken to achieve the visual management objectives.
visual values: (see scenic quality).

Illustration 1 Visual Resource Management System for BLM



Rel. 8-24
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Bibliography

BOOKS

Appleyard, Donald; Lynch, Kevin; and Meyer, John R. The View from the Road. M.I.T. Press, Cambridge; 1964.

Litton, R. B. Jr. Aesthetic Demension of the Landscape. University Press, 1972.

McHarg, Ian L. Design with Nature. The Natural History Press, Garden City, The Natural History Press, Garden City, New York; 1969.

Rutledge, Albert J. Anatomy of a Park. McGraw Hill Book Company, New York; 1971.

Simonds, John O. Earthscape. McGraw Hill Book Company, New York; 1978.

Simonds, John O. Landscape Architecture. F.W. Dodge Corporation, New York; 1961.

MAGAZINES

Landscape Architecture. Louisville: The Publication Board of the American Society of Landscape Architects, published bi-monthly.

Landscape Journal. Madison: The University of Wisconsin Press, published twice yearly.

GOVERNMENT PUBLICATIONS

USDA FOREST SERVICE

Descriptive Approaches to Landscape Analysis: (R.B. Litton, Jr.), 1979.

Forest Landscape Description and Inventories; A Basis for Land Planning and Design: (R. B. Litton, Jr.) Research Paper Number PS W-49, 1968.

Landscape Control Points; A Procedure for Predicting and Monitoring Visual Impacts: (R.B. Litton, Jr.) General Technical Report Number PSW-91, 1973.

National Forest Landscape Management, Volume 1: (Agriculture Handbook 434). U.S. Government Printing Office, Washington, D.C.; 1973.

National Forest Landscape Management, Volume 2, Chapter 1, The Visual Management System: (Agriculture Handbook 462). U.S. Government Printing Office, Washington, D.C.; 1974.

National Forest Landscape Management, Volume 2, Chapter 2, Utilities: (Agriculture Handbook 478). U.S. Government Printing Office, Washington, D.C.; 1975.

National Forest Landscape Management, Volume 2, Chapter 3, Range: (Agriculture Handbook 484). U.S. Government Printing Office, Washington, D.C.; 1977.

National Forest Landscape Management, Volume 2, Chapter 4, Roads: (Agriculture Handbook 483). U.S. Government Printing Office, Washington, D.C.; 1977.

National Forest Landscape Management, Volume 2, Chapter 5, Timber: (Agriculture Handbook 559). U.S. Government Printing Office, Washington, D.C.; 1980.

Our National Landscape - Annotated Bibliography and Expertise Index: Special Publication 3279. Berkeley: Pacific Southwest Forest and Range Experiment Station, 1981.

Proceedings of Our National Landscape: A Conference on Applied Techniques for Analysis and Management of the Visual Resource (General Technical Report PSW-35). Berkeley: Pacific Southwest Forest and Range Experiment Station, 1979.

USDI BUREAU OF LAND MANAGEMENT

Visual Resource Management Program. U.S. Government Printing Office, Washington, D.C.; 1980.

Visual Simulation Techniques. U.S. Government Printing Office, Washington, D.C.; 1980.

Visual Resources Management (VRM)

What Is It?

“A System for minimizing the visual impacts of surface-disturbing activities and maintaining scenic values for the future.”

Why Is It Important?

85% of Americans consider Scenery the most important value of public lands.

- After walking, the most popular ‘Recreational or Leisure Activity’ is ‘Driving For Pleasure’ (NSRE). Related to BLM’s Benefits Model (Settings/Experiences/Benefits).

It’s Required By Law!

- Federal Land Policy & Management Act (FLPMA) - BLM’s Organic Act.
- National Environmental Policy Act (NEPA).
- BLM’s Mission – “...sustain the health, diversity and productivity of the Nation’s public lands for the use and enjoyment of present and future generations.”

What Is It Not? (It’s Counter-Intuitive)

- It is not a way to Stop projects! In actuality, it is a way for projects to occur!
- “Management Classes” don’t dictate where a project can and can’t occur.
- It’s even more important to do a good job with VRM in the more degraded or impacted areas (VRM Class 3 & 4 – they’re not sacrifice areas!).

VRI vs. VRM

- The San Luis Valley Field Office has a brand new Visual Resources INVENTORY (VRI) – ‘the way the landscape “actually is.”
- The next step is to amend the RMP (based *mostly* on the VRI) and decide what the Visual Resources MANAGEMENT Classes are – ‘the way we want to manage the landscape.’

VRM Classes

Areas are assigned to one of four classes based on the scenic quality, visual sensitivity, and distance zones. Each class has an objective that determines the management objectives for that area:

- Class I Objective: Preserve the existing character of the landscape. The level of change should be very low and must not attract attention.
- Class II Objective: Retain the existing character of the landscape. Allow a low level of change that should not attract the attention of a casual observer.
- Class III Objective: Partially retain the existing character of the landscape. Allow a moderate level of change that may attract attention but should not dominate the view of a casual observer.
- Class IV Objective: Provide for management activities that require major modifications of the existing character of the landscape. The level of change may be high and may dominate the view and be the major focus of viewer attention.
- And the SLVFO even has “Class V” – the Blanca Mountain chaining area....

Best Management Practices (BMP’s)

- Form, Line, Color, Texture and Contrast Rating Analysis for new projects.



U.S. Department of the Interior
Bureau of Land Management

November 2020

Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons

Environmental Assessment DOI-BLM-UT-Y010-2020-0068

Location: Grand County, Utah



Bureau of Land Management, Moab Field Office, 82 E. Dogwood, Moab, Utah

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CHAPTER 1. INTRODUCTION

The Moab Field Office of the Bureau of Land Management (BLM) proposes to enact limitations (in accordance with regulations found at 43 Code of Federal Regulations (CFR) §8365) to limit aerial and roped activities, as well as the construction of temporary or overnight structures, in Mineral and Hell Roaring Canyons, as well as along the canyon rims of the Green River corridor connecting these two canyons. The proposed restricted area excludes the Mineral Bottom BASEjumping Focus Area as defined in the 2008 Moab Resource Management Plan (RMP), the Mineral Bottom Airstrip as defined in ROW #UTU-79987, and the Fruit Bowl Highlining Area.

As a result of information received during Scoping, the following locations are also excluded from the proposed restricted area: the Waterslide (a highlining area), the Green River Bowl (a highlining area) and the climb known as the Corner Tower. The proposed area of restriction is shown on Map 1 in Appendix C. The proposed area of restriction totals 10,044 acres.

1.1. Background

In the past decade, tourism in the Moab Field Office has increased over 58%; in 2019, the Field Office hosted 1.9 million visitors, and over 3 million visitor days. During the same period, visitation increased by over 72% in nearby Canyonlands National Park. As a result of increased human pressure, recreational activities are expanding into very remote canyon regions important to important wildlife species.

Roped activities are activities involving ropes, cables, vectran, climbing aids, webbing or anchors; hereafter these activities will be referred to as “roped activities”. Activities that would be affected by the proposed restriction include, but are not limited to: ziplining, high-lining, slacklining, climbing, rappelling, canyoneering and rope swinging. Aerial activities include those that either start on, conclude on or suspend over BLM land, such as BASEjumping, vaulting, human catapulting, paragliding, paramotoring, parachuting, skydiving, drone launching and aerial delivery.

Mineral and Hell Roaring Canyons are important habitat for a variety of wildlife, including golden eagles, Mexican Spotted Owl and other raptors, as well as for desert bighorn sheep. In recent years, recreational activity has increased, putting wildlife and their prime habitat at risk. People engaging in the majority of recreational activities, such as camping, hiking, biking, four wheeling, and other vehicle uses, do not access the inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes in the remote backcountry of the Moab area, especially in the Mineral and Hell Roaring canyon areas. Historically, desert bighorn sheep have sought refuge here, utilizing these cliffs and canyons as escape terrain. This escape terrain has the only remaining habitats that bighorn can safely utilize year-round for lambing, rutting and daily foraging, as well as for drinking and resting needs. A variety of raptors and eagles have found isolated and undisturbed nesting in these canyons. Roped and aerial activities provide direct access into these limited remaining escape terrains and nesting sites, leaving these animals with no consistent undisturbed habitats.

The BLM seeks to mitigate this conflict by restricting those recreational activities with the greatest potential to impact wildlife in the highest valued habitats. While commercial Special Recreation

Permit (SRP) holders have been required to adhere to wildlife stipulations, the general public has not, as there is currently no mechanism to restrict these activities.

Limitations on Other BLM Programs in Mineral and Hell Roaring Canyons

Mineral and Hell Roaring Canyons have been limited for many other BLM programs and activities to protect wildlife resources including desert bighorn sheep, raptors and eagles and their habitats. For example, the entire area is managed as No Surface Occupancy (NSO) for fluid mineral leasing, meaning that fluid mineral operations cannot occupy the surface of the land. This NSO stipulation extends to all other federal and non-federal surface disturbing activities, including the construction of new roads, facilities and trails.

Grazing in the two canyons is also limited to protect wildlife; Mineral Canyon is grazed by 4 horses for two months per year and Hell Roaring is grazed by 94 cattle for two months per year (winter grazing only). Approximately 2.5 miles of the road up Mineral Canyon (past the State section) has been closed to protect bighorn as well as another 1.5 miles in various locations along the rims of the canyon. (There is a non-maintained two-track route in Hell Roaring Canyon that is currently subject to review as part of the Labyrinth Rims/Gemini Bridges Travel Management Plan.) All motorized vehicles and mountain bikes are limited to designated roads. There are no designated mountain bike trails within the area and no new mountain bikes trails would be allowed because the area is managed as NSO for all surface disturbing activities. The Moab Resource Management Plan (RMP) directs the BLM to manage lambing areas (46,319 acres - see Map 9) by allowing camping in designated campsites only (WL- 37, page 142). No campsites are designated in Mineral or Hell Roaring Canyons to protect desert bighorn sheep habitats. In addition, no Special Recreation Permits (SRPs) have been permitted in Hell Roaring Canyon or in the upper portion of Mineral Canyon because of wildlife concerns.

This Environmental Assessment is being prepared to analyze the impacts of restricting the activities listed above in Mineral and Hell Roaring Canyons and on the connecting corridor along the Green River (10,044 acres).

1.2. Purpose and Need

Mineral and Hell Roaring Canyons are tributaries of the Green River and are located immediately north of Canyonlands National Park. Because of their steep cliffs and remote nature, they are important occupied habitat for many raptors, including golden eagle and Mexican spotted owl, as well as crucial lambing and rutting habitat for desert bighorn sheep. The desert bighorn sheep herd that inhabits these canyons as well as nearby Canyonlands National Park is the only herd in Utah that escaped extirpation after the arrival of white settlers from unregulated hunting, habitat disturbance and grazing domestic sheep, which spread diseases to native sheep. This particular herd has been used to repopulate other areas throughout the West.

Recreation use in Mineral and Hell Roaring Canyons has historically been low, allowing animals undisturbed use of these important habitats. However, as tourism to the Moab Field Office has increased, recreational activities have expanded into these remote canyon regions that had previously provided crucial wildlife habitats with minimal disturbance. Although canoeing use of the Green River has been a constant, recent years have seen an increase in types of activities deemed to be especially detrimental to both raptors and bighorn sheep. These activities include those involving ropes (such as climbing, rope swinging and highlining), and aerial delivery such as but not limited to BASEjumping and drone launching.

The Moab RMP provides goals and objectives that direct the field office to ‘manage crucial, high-value, and unfragmented habitats as management priorities’ and ‘provide for multiple recreational uses of the public lands while sustaining the recreation resource base and sensitive resource values’. The need for this action is for the BLM to proactively secure the continued use of important wildlife habitats by developing limitations on recreation activities likely to compromise these crucial habitats, given that recreation is expanding. These limitations would inform a management stratagem to address expanding recreational use by proactively managing recreationists in the vicinity of Mineral and Hell Roaring Canyons, where critical habitats and sensitive resource values exist.

Though both raptors and desert bighorn sheep exist at various levels throughout the Moab Field Office, Mineral and Hell Roaring Canyons offer a habitat with unique opportunities for these species found nowhere else in the field office. The proposed area of limitation was selected from data collected over the past several decades that identified high population levels and successful reproduction coupled with currently low recreational use and high-quality breeding and year-round habitats. Activities involving ropes and aerial delivery allow for human access into otherwise inaccessible portions of these crucial habitats, whereas traditional forms of recreation (hiking, OHVing, driving, camping) and other public uses such as grazing cannot reach. The purpose of the action alternatives is to proactively find a balance between recreational uses that access otherwise inaccessible portions of crucial wildlife habitat in Mineral and Hell Roaring Canyons.

1.2.1. Decision to be Made

The BLM will decide whether to limit roped and aerial activities, as well as temporary structures, in Mineral and Hell Roaring Canyons to avoid expansion of these activities in this area. The reason for this decision would be to benefit raptor, Mexican spotted owl and desert bighorn sheep habitat within the canyons. Following a decision to manage these activities, the BLM would pursue establishment of a supplementary rule in accordance with 43 CFR 8365.1-6.

1.3. Scoping and Issues

The proposal has been discussed internally at the Moab Field Office for at least ten years. Biologists with the Moab Field Office and the Utah Division of Wildlife Resources have identified the habitat in question through collar studies (2002 through the present) and other data gathering techniques dating back to the early 1960s. On April 7, 2020, the proposed project area and an outline of the proposed limitations were presented to the Moab Interdisciplinary Team. The conclusions of this meeting are presented in Appendix A of this document.

The project was posted on the BLM’s ePlanning website on April 7, 2020, including a map of the proposed area of limitation. A formal Scoping Period was announced to the public via a Press Release on May 29, 2020. The proposal was the subject of a feature story in the *Salt Lake Tribune* on June 18, 2020 (“Climbers balk as feds seek to shut down roped activity in two popular canyons near Moab”). The proposal also received a great deal of distribution on various non-BLM social media outlets. The formal Scoping Period was held from June 1 to June 30, 2020. As a result of the Scoping process, the BLM received comments from 222 individuals and interest groups, as well as from two agencies (the U.S. Fish and Wildlife Service and the Utah Division of Wildlife

Resources.) A summary of the scoping comments and the BLM's responses are displayed in Appendix B of this document.

As a result of both internal and external scoping, the following issues have been identified:

Table 1. Issues Analyzed in Detail

RESOURCE AND ISSUE #	ISSUE STATEMENT
Recreation – Issue 1	Increased use of Mineral and Hell Roaring Canyons by roped and aerial enthusiasts has been impacting various wildlife species. Before such activities spread further into the canyon system, the BLM seeks to manage this area for the benefit of these species. Within the Moab Field Office, 33 areas and over 1,095 climbing routes have been identified by the Mountain Project (2020); the Moab BLM houses data for 212 mapped climbs; limitations on these activities could have an effect on six climbing routes in Hell Roaring Canyon (identified through public scoping) and on the choices that recreationists have to do other aerial and roped activities in the Mineral and Hell Roaring area.
Threatened and Endangered Species: Mexican Spotted Owl - Issue 2	Mexican spotted owls nest in these canyons. This species is particularly sensitive to disturbances. Roped and aerial activities directly impact the environment that they need for survival.
Raptors, including Golden Eagles – Issue 3	Golden Eagles are a species of concern; they nest in these canyons. This species is particularly sensitive to disturbances. Other raptors also utilize the canyons for nesting and foraging habitat. Roped and aerial activities directly impact the environment that raptors need for survival.
Desert Bighorn Sheep – Issue 4	The desert bighorn sheep herd in this area is of particular concern. Roped and aerial activities directly impact the environment that these sheep need for survival.

CHAPTER 2. ALTERNATIVES

2.1. Alternative A

The BLM proposes to limit aerial and roped activities, as well as the construction or installation of temporary or overnight structures, in and along the walls and rims of Mineral and Hell Roaring Canyons, as well as along the canyon walls and rims along the Green River corridor connecting these two canyons. This limitation would be applicable year-round.

The proposed restricted area excludes the Mineral Bottom BASEjumping Focus Area as defined in the 2008 Moab Resource Management Plan (RMP), the Mineral Bottom Airstrip as defined in ROW #UTU-79987, Corner Tower, and the Fruit Bowl, Waterslide and Green River Highlining Areas. The proposed area of limitation (including the specifically excluded areas) is shown on Map 1 in Appendix C. The proposed area of limitation totals 10,044 acres, which represents less than 0.5% of the field office area.

Roped activities are those involving ropes, cables, Vectran, climbing aids, webbing or anchors. Roped activities include, but are not limited to: ziplining, space-netting, high-lining, slacklining, climbing, rappelling and rope swinging. Aerial activities are those which involve air delivery of a person or object from or to BLM land, including but not limited to BASEjumping, skydiving, vaulting, catapulting, paragliding, parachuting and other forms of aerial delivery, including drones.

Following any decision to limit activities, the BLM would pursue establishment of supplementary rules in accordance with 43 CFR 8365.1-6.

2.2. Alternative B

Alternative B is the same as Alternative A, except permits would be issued seasonally for the following climbs (all in Hell Roaring Canyon):

Kachina Towers -North and South: 20 permits (with up to 4 people per permit) would be issued from September 1 – December 31 (that is, no permits would be issued from January 1 – August 31). The permit would be issued by contacting the Moab Field Office by phone; the permit would allow climbing one or both of the towers. No more than one permit per day would be issued for Kachina Towers North and South. Permits could be obtained by commercial permittees as well as by private climbers

Gollum: 5 permits (with up to 4 people per permit) would be issued from September 1 – October 15 and from December 15 – December 31 (that is, no permits would be issued from January 1 – August 31 and from October 15 – December 15). The permit would be issued by contacting the Moab Field Office by phone. No more than one permit per day would be issued for the Gollum. Permits could be obtained by commercial permittees as well as by private climbers. Access to the Gollum would be only from the south rim of Hell Roaring Canyon.

Witch/Warlock/Cauldron: : 10 permits (with up to 4 people per permit) would be granted from September 1 – October 15 and from December 15 – December 31 (that is, no permits from January 1 – August 31 and from October 15 – December 15). The permit would be issued by contacting the Moab Field Office by phone; it could be used to climb any or all of the three climbs. No more than one permit per day would be issued for this set of climbs. Permits could be obtained by commercial permittees as well as by private climbers. Access to the Witch/Warlock/Cauldron would be only from the south rim of Hell Roaring Canyon.

Throughout the remainder of the management area, there would be no roped or aerial activities, nor installation of temporary structures, allowed on a year-round basis, as outlined in Alternative A.

2.3. Alternative C– No Action Alternative

The BLM would continue to allow unlimited roped and aerial activities in Mineral and Hell Roaring Canyons. No limitations would be imposed and wildlife habitat would be compromised. Permitted activities would continue to be governed by stipulations attached to the permit that disallow use in this area; commercial operations could continue to be disallowed.

2.4. Alternatives Considered but Eliminated from Detailed Analysis

An alternative was considered that would impose limitations on roped and aerial activities on 107,220 acres of crucial bighorn habitats that are also prime habits for raptors, eagles and Mexican spotted owl. (The proposed management area represents about 10,000 acres of this larger habitat area). Stipulations have been imposed on mineral leasing activities on 107,220 acres of habitat (“Drilling operations and permanent facilities would not be allowed within desert bighorn sheep lambing and rutting habitat”: *Moab Master Leasing Plan*, page A-22); stipulations also preclude all surface disturbing activities (2008 Moab RMP, WL-36). While the alternative would benefit wildlife by providing a larger area of restriction, the alternative was considered to be too impacting to large numbers of recreationists engaging in roped and aerial activities. The 10,000 acres that is proposed for limitation in the action alternatives represents the most important and least disturbed habitat within the larger 107,220 acres that is heavily stipulated for mineral leasing.

2.5. Conformance

The Action Alternatives (Alternatives A and B) described above are in conformance with the 2008 Moab Resource Management Plan (RMP). The following decisions are pertinent to the proposal:

REC-2 (page 81): Where unacceptable damage to natural or cultural resources by recreational use is anticipated or observed, BLM will seek to limit or control activities by managing the nature and extent of the activity or by providing site improvements that make the activity more sustainable or by a combination of management controls and facility development. Such management actions will seek to reduce or eliminate the adverse impact while maintaining the economic benefits associated with a wide range of recreation uses.

REC-3 (page 81): BLM will consider and, where appropriate, implement management methods to protect riparian resources, special status species, and wildlife habitat while enhancing recreation opportunities. Management methods may include limitation of visitor numbers, camping and travel controls, implementation of fees, alteration of when use takes place, and other similar actions to be approved through normal BLM procedures.

SSS-3 (page 117): As required by the Endangered Species Act, no management action will be permitted on public lands that will jeopardize the continued existence of plant or animal species that are listed or are officially proposed or are candidates for listing as T and E.

SSS-20 (page 120): Mexican Spotted Owl lists five actions that would be taken to protect this species. These actions include “monitor and protect known Protected Activity Center (PAC) sites according to USFWS recommendations and MSO Recovery Plan”, and :manage habitat for MSO according to USFWS and UDWR recommendations and recovery plans.

SSS-29 (page 123): Golden Eagle lists four actions that will be undertaken to protect this species, including the protection of golden eagle nest and habitat.

WL-1 (pag136): Continue to implement and modify three Habitat Management Plans (HMPs) summarized in Appendix U: Hatch Point HMP, Dolores Triangle HMP and the Potash-Confluence HMP.

WL-18 (page 138) Raptors will be managed under the auspices of Best Management Practices (BMPs; see Appendix R), which will include implementation of spatial and seasonal buffers. These BMPs implement the USFWS's Guidelines for Raptor Protection from Human and Land-use

Disturbances, with modifications allowed as long as protection of nests is ensured. Seasonal and spatial buffers are also listed in Appendix R. Cooperate with utility companies to prevent electrocution of raptors. Temporarily close areas (amount of time depends on the species) near raptor nests to rock climbers or other activities if the activity could result in nest abandonment.

WL-36 (page 141): **Bighorn Sheep Habitat:** To protect lambing, rutting, and migration habitat (101,897 acres), apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface disturbing activities (see Appendix A).

WL-37 (page 142): **Bighorn Sheep Habitat:** Manage lambing areas with the following prescriptions: camping is allowed only in designated campsites.

Appendix A (page A19): In Desert Bighorn Sheep Lambing Grounds and Migration Corridors (101,897 acres), no surface disturbing activities are allowed. (*Note: this stipulation applies to all surface disturbing activities, not just to oil and gas – see introduction to Appendix A*).

The Moab Master Leasing Plan (2016) expanded the prohibition on surface disturbing activities from mineral operations in desert bighorn sheep habitat to 107,220 acres.

In addition, The Federal Land Policy and Management Act mandates multiple use of Public Lands, including recreation use and wildlife habitats.

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

This chapter defines the scope of analysis contained in this EA, describes the existing conditions relevant to the issues presented in Table 1 in Section 3.2, and discloses the potential direct, indirect and cumulative impacts of the action and no action alternatives. Issues have been presented in Chapter 1; for a discussion of issues not brought forward, see the Interdisciplinary ID Team Checklist (Appendix A).

General Setting

The Mineral and Hell Roaring canyon bottoms are tributaries of the Green River; they are located just north of Canyonlands National Park. The canyons are somewhat difficult to access by vehicle. A maintained road descends from the plateau to the river bottom, accessing the Mineral Bottom Boat Ramp, the Mineral Bottom Airstrip and the White Rim Road in Canyonlands National Park. A less maintained road travels 1.5 miles up Mineral Canyon to a dead-end. Past the Mineral Bottom airstrip, the primary access road along the Green River becomes increasingly difficult. A very difficult track goes up Hell Roaring Canyon, but it receives very little use due to its condition. On the plateau above the canyons, there are several two-track roads that access the edges of the canyons. The lack of travel access has provided remote, undisturbed habitats for various wildlife species.

In the past decade, tourism in the Moab Field Office has increased over 58%; in 2019, the field office hosted 1.9 million visitors, and over 3 million visitor days. During the same period, visitation has increased by over 72% in nearby Canyonlands National Park. As a result of increased human pressure, recreational activities are expanding into very remote canyon regions, such as Mineral and Hell Roaring Canyons. These canyons provide crucial habitats with minimal human disturbances for several unique and sensitive wildlife species in the Moab Field Office. Species frequenting these two canyon systems include desert bighorn sheep, Mexican spotted owls, golden eagles, peregrine falcons and several other raptor species. Due to the often unpredictable and

inconsistent nature and unpredictable locations of roped and aerial activities, these activities result in a greater potential to be perceived as predation by wildlife than do more traditional recreation activities that occur in predictable locations. Thus, recreational activities that involve ropes and aerial components have a greater potential to directly impact these species than do the traditional recreation activities of driving, hiking or canoeing, as they are predictable to wildlife.

Analysis Assumptions

Wildlife Assumptions

The analysis assumes that there would continue to be an increase in tourism, visitation and associated recreation activities to the Moab area and Grand County. This analysis also assumes that roped and aerial activities would continue to expand into backcountry areas surrounding Moab that currently do not see many roped and aerial activities. There is extensive peer reviewed and scientific research that investigates the impacts of various recreational activities to numerous ungulate and avian wildlife species that occupy remote canyon regions of the world. Though activities such as slacklining, highlining, BASEjumping, climbing, and human catapulting have not been the subject of extensive specific reviews, it will be assumed that individual wildlife would have similar responses to human activities studied in the cited research studies, with a potential for greater adverse responses due to the juxtaposition of these aerial and roped activities to these sensitive habitats.

It will also be assumed that impacts from roped and aerial activities are similar in size and intensity to off-trail hiking. Roped and aerial activities have similar impacts to wildlife, including unpredictability, the lack of consistency in behavior, and the potential for wildlife to perceive the activities as predation threats. Roped and aerial activities in the proposed management area can occur at random, at unpredictable and inconsistent times and locations, and with varying group size and intensity. Impacts from roped and aerial activities are also similar in size and intensity of driving and hiking as roped and aerial activities require driving and hiking to the often remote site, and directly or indirectly occupying the canyon rims, walls and canyon bottoms where prime habitats for desert bighorn sheep, raptors, eagles and Mexican spotted owl are found.

The analysis further assumes that impacts identified in cited peer reviewed and scientific research documents, though not specific to roped and aerial activities, reflect applicable direct or indirect impacts for the reasons mentioned above.

These important canyons currently are functional source habitats (high quality areas where birth rates are greater than death rates, causing the population to grow, and resulting in emigration to other areas). It can also be assumed that as habitat fragmentation and human disturbances increase, these areas could become a sink habitat (very low-quality habitat that, on its own, would not be able to support a population). As a result, species may become reduced or locally extirpated.

These assumptions are based on extensive peer reviewed and scientific research that has found that human disturbance results in alteration in ungulate and raptor behavior and has been associated with avoidance behavior (Frid and Dill 2002), physiological stress (Hayward et al. 2011, Strasser and Heath 2013), and impaired sensory perception (Mason et al. 2016), changes in habitat use (Gill and Sutherland 2000, Webber et al. 2013), interference with foraging behavior (Ferna'ndez-Juricic and Teller'ia 2000), alteration of self-maintenance regimes (Kight and Swaddle 2007), and reduction in parental care to young (Ferna'ndez and Azkona 1993, Steidl and Anthony 2000). Human disturbance has been associated with reduced breeding success (Buick and Paton 1989,

Brambilla et al. 2004, Watson et al. 2014), which may lead to population declines (Palacios and Mellink 1996, Wiedmann and Bleich 2014, Pauli et al. 2017). The level of impacts by alternatives will be further discussed in the analysis that follows.

Recreation Assumptions

This analysis also assumes the roped and aerial activities would occur in canyon and cliff type areas that offer topographic features similar to those found in the vicinity the current 212 known climbing locations found in the database housed by the Moab Field Office. These 212 climbing locations occur on geologic formations within 225,700 acres. Table 1 shows the number of known climbs by acreage and by geologic formation (age) within the Moab Field Office.

Table 1: Known Climbs by Formation and Acreage

Formation Age	Number of known climbs	Acreage
Permian age Formations (Cutler)	14	12,691
Jurassic age Formations (Wingate, Kayenta, Navajo, Carmel, Entrada, Morrison, Curtis)	143	198,228
Triassic age Formations (Moenkopi, Chinle)	42	9,844
Holocene & Pleistocene age Formations (talus slopes)	14	4,944
Total	212	225,700

Jurassic age formations appear to be the most suitable for roped activities, as evidenced by the percentage of known climbs within them. Thus, it is assumed that the greatest opportunities to expand roped and aerial activities occur on the 198,228 acres that provide the highest concentration of known climbing routes. Map 2 in Appendix C provides a depiction of Moab database climbing routes, Mountain Project climbing areas and associated geology.

3.1. Issue 1: Recreation

Recreation – Issue 1

Increased use of Mineral and Hell Roaring Canyons by roped and aerial enthusiasts has been impacting various wildlife species. Before such activities spread further into the canyon system, the BLM seeks to manage this area for the benefit of these species. Within the Moab Field Office, 33 areas and over 1,095 climbing routes have been identified by Mountain Project (2020). The Moab BLM houses data for 212 mapped climbs; limitations on these activities could have an effect on six climbing routes in Hell Roaring Canyon (identified through public scoping) and on the choices that recreationists have to do other aerial and roped activities in the Mineral and Hell Roaring area.

Two known highlining areas of fewer than 100 acres total are also within the project area. All other known highlining areas are excluded from the project area.

3.1.1. Affected Environment

The project area is within the Labyrinth Rims/Gemini Bridges Special Recreation Management Area (SRMA). This 300,000 acre SRMA has Recreation Management Zones, or Focus Areas, that are managed for particular types of recreation activity.

The portion of the project area that is directly adjacent to the Green River is within the Labyrinth Canyon Canoe Focus Area (7,709 acres). In 2019, 4,864 private boaters and 910 commercial passengers floated the river. Some people debark at the Mineral Canyon Boat Ramp; others continue on to float through Stillwater Canyon, which is largely within Canyonlands National Park. Stillwater Canyon float trips usually embark at Mineral Bottom; all but four miles of that 60 mile trip are within Canyonlands National Park.

The Mineral Bottom BASEjumping Focus Area (762 acres) is adjacent to, but not within, the area proposed for limitations on roped and aerial activities. This focus area emphasizes aerial activities, primarily BASEjumping. It is excluded from the project area.

The remainder of the project area is not within a specific focus area. However, in recent years, the cliffs of both Mineral and, to a lesser extent, Hell Roaring canyons have become increasingly popular with climbers, rope swingers, space netters, highliners, BASEjumpers and other roped or aerial enthusiasts. These canyons have great verticality and are relatively close to Moab with good access via SR 313 and the heavily maintained Mineral Bottom Road. While the exact level of this type of use is unknown, observational evidence indicates that roped and aerial use has grown in recent years and has expanded to more locations.

A very popular area with roped and aerial enthusiasts is known as the “Fruit Bowl”. This area is partially on State of Utah (SITLA) lands and partially on lands managed by the BLM. To facilitate unified management of the activity, the BLM has entered into a Cooperative Management Agreement (CMA) with SITLA for the parcel containing the Fruit Bowl. This CMA allows the BLM to better manage the area, as BLM regulations are enforceable, and to permit an annual highlining festival, hosted by Slackline US in November of each year. The proposed area of limitation does not contain the Fruit Bowl area permitted to the festival *per se*, but lands below and adjacent to the Fruit Bowl are included in the project area. Map 3 in Appendix C illustrates the proposed area of limitation surrounding the excluded Fruit Bowl.

The Moab BLM maintains a climbing database that has mapped approximately 212 climbing sites in the Moab Field Office area. Mountain Project (2020) maps approximately 1,095 routes in this area. Although the BLM database is not an exhaustive list, it does provide a representation of the extent of climbing locations in the area and is useful in determining geological potential for various roped and aerial activities; it provides a baseline for analysis. Using this data, it was determined that at a minimum, there are over 225,700 acres of canyon and red rock formations within the Moab Field Office that provide the rock formations where various roped and aerial type activities may occur (see Map 2 in Appendix C for climbs and their associated geology). Of the 212 known climbs in the Moab Field Office area, six known climbs are located within the project area and are used by an unspecified, but small number of climbers per year (information received during scoping identified fewer than 50 small groups per year use these climbs). These climbs are

approximately 18-20 miles from the town of Moab and include the Witch and the Warlock, the Cauldron, the Gollum and North and South Kachina Spires. No climbs were identified in Mineral Canyon during the Scoping Period, nor by any of the climbing advocates, groups or individuals who commented during that period.

Other recreation uses in the project area include canoeing, bicycling and driving on designated roads. There is some very limited hiking use of the canyons and their rims. People who enjoy viewing wildlife have an excellent chance of viewing desert bighorn sheep, one of Utah's most iconic native big game species, in the project area.

The State of Utah manages a hunting season for desert bighorn sheep, annually permitting three to five tags within the entire unit (over 300,000 acres). This is a once-in-a-lifetime hunt, and only rams are harvested, typically rams older than seven years of age. The sale of these tags typically generates over \$57,000 and is matched with other federal funds to total approximately \$225,000. These funds are then used to protect and improve bighorn habitats, often directly within the Moab area. Hunters who wish to pursue one of the most sought-after big game animals in North America have opportunities to fulfill their tags in the project area. The project area offers one of the best venues for this hunt, given its remote and backcountry nature.

3.1.2. Environmental Impacts

3.1.2.1. *Impacts of Alternative A to Recreation–Year Round Management*

Those canoeing the Green River would not be negatively impacted by Alternative A. Canoeists who value serenity could gain positive benefits by not being impacted by the activities of those engaged in roped and aerial activities and delivery.

Recreationists who enjoy roped and aerial activities would continue to enjoy these activities on over 1,000 climbing routes within over 215,000 acres of canyon areas in the Moab Field Office. Alternative A would limit roped and aerial activities on 10,044 acres in the Mineral-Hell Roaring area. These recreationists could still use the BASEjumping Focus Area for roped and aerial activities, as well as the Waterslide, the Green River Bowl and the Fruit Bowl, but roped and aerial activities would not be allowed to continue to expand to areas in Mineral and Hell Roaring outside those polygons. These limitations would apply to both private and commercial users, although there is currently no commercial use in the area covered by Alternative A. The primary impact would be to those private users who wish to expand roped and aerial activities outside the areas set aside for them. These users often identify themselves by their activity; their chosen activity is of prime importance to them.

There are over 225,700 acres of canyon and red rock formations within the Moab Field Office that host over 1,000 climbing routes (212 known climbs and 1,095 routes identified on Mountain Project). These 225,700 acres are where various roped and aerial activities already occur and may readily expand. This is especially true on the 198,228 acres of Jurassic age Formations that host 143 of the 212 known climbs. While Mineral and Hell Roaring canyons are partially in the Navajo and Kayenta formations, they also offer approximately 4,000 acres of Wingate and other formations that present the best opportunities for roped and aerial activities (primarily in the Kayenta and Chile Formations). Limiting roped and aerial activities on the 10,044 acres in Alternative A would remove only about 4.5% of future "climbing opportunity area" in the Moab Field Office.

Of the 212 known climbing routes on BLM lands available in the Moab area, six remote climbs, the Witch and the Warlock, the Cauldron, the Gollum, and North and South Kachina Spires would no longer be available to the unknown but small number of climbers who enjoy them each year (fewer than 50 small parties per year, or possibly fewer than 25 per year according to scoping comments received from the Access Fund). Making these six climbs unavailable to the public is expected to impact climbers by reducing available known climbing locations by less than 2%. Over 200 database-mapped climbing areas and well over 1,100 climbing routes total in the Moab area would remain available to the public if Alternative A were to be chosen. Limiting roped and aerial activities in Alternative A would remove 0.6% of climbing routes in the Moab Field Office.

Four highlining areas (Colorado Bowl, Highlander Bowl, Waterslide and Green River Bowl) were identified within the proposed management area. Two of these (Waterslide and Green River Bowl) have been excluded from the proposal; thus, out of the 10,044 acres, only two small highlining areas (Colorado Bowl and Highlander Bowl with fewer than 100 acres) would be unavailable to aerial recreationists.

Those who enjoy biking or driving on the designated roads and trails in the area would not be impacted by Alternative A. In addition, hikers in the canyons or on the rims would not be impacted by this alternative. Those bicyclists, drivers or hikers who value serenity could gain benefits from the absence of roped or aerial activities.

Those recreationists who value seeing desert bighorn sheep, other wildlife and raptors in their natural environment would benefit from Alternative A because the herd would be protected and would not seek escape terrain farther into the backcountry as a result of roped or aerial activities. As a result, these visitors may have a better opportunity to view desert bighorn sheep, other wildlife and raptors typically not visible in higher recreational use areas.

Hunters who wish to pursue prime trophy hunting opportunities for desert bighorn sheep (a once-in-a-life hunt) would benefit from Alternative A because the viability of the herd would be protected and the herd could possibly increase. Mineral and Hell Roaring canyons provide the primitive, remote and undisturbed habitat that is conducive to this trophy hunting experience. Alternative A would enhance the herd and thus the experience for those hunters.

3.1.2.2. *Impacts of Alternative B to Recreation– Year Round Management with the Issuance of Seasonal Climbing Permits for Selected Climbs*

The impacts of Alternative B to Recreation would be the same as those in Alternative A except that a limited number of climbers would retain access to the Witch, the Warlock, the Cauldron, the Gollum and Kachina Towers. This access would be by permit; permits would be issued seasonally and group size would be limited; a limited number of permits would be issued.

Recreationists who enjoy roped and aerial activities would continue to enjoy these activities year-round on over 1,000 climbing routes within over 215,000 acres of canyon areas and continue to enjoy the BASEjumping Focus Area for roped and aerial activities as well as Corner Tower, the Waterslide, the Green River Bowl and the Fruit Bowl, but roped and aerial activities would not be allowed to continue to expand to areas in Mineral and Hell Roaring outside those polygons. These limitations would apply to both private and commercial users.

Alternative B would remove only about 4.5% of future “climbing opportunity area” in the Moab Field Office and seasonally remove 0.6% of climbing routes in the Moab Field Office.

3.1.2.3. *Impacts of Alternative C to Recreation – No Action Alternative*

Under the No Action alternative, roped and aerial activities would continue in the project area. Recreation activities that have been primarily undertaken in the Mineral Bottom BASEjumping Focus Area and more recently at the Fruit Bowl would likely continue to expand to adjoining areas in Mineral and Hell Roaring canyons. There would be no limitations imposed on climbers, rope swingers, space-netters, highliners, drone operators or BASEjumpers along the rims of Mineral and Hell Roaring canyons or on other aerial or roped uses that have the potential to directly impact crucial wildlife habitats.

Established climbs, including the Witch and the Warlock, the Cauldron, the Gollum, and North and South Kachina Spires, would continue to be available to the climbing community without any limitations, as would several user-developed highlines/rope swing/basejumping areas. The expansion of existing areas and the establishment of new areas for aerial and roped activities may require additional management to ensure that public lands are managed appropriately. Users who enjoy the natural and quiet landscape may have reduced experience as existing and new areas become more popular.

Those canoeists, drivers, bicyclists or hikers who enjoy a more natural and quiet landscape would be required to co-exist with roped and aerial enthusiasts and there could be reduced opportunity to view wildlife such as bighorn, eagles and raptors.

Hunters wishing to pursue opportunities for trophy hunting of desert bighorn rams (in a once-in-a-lifetime hunt) would have fewer opportunities if game populations were reduced due to undue human disturbance in the Mineral-Hell Roaring area. If desert bighorn sheep populations were reduced to a significant degree, the hunting opportunity might be lost altogether due to expanding recreation use.

3.1.2.4. *Cumulative Impact*

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

Cumulative Impact Area (CIA) for Recreation and Wildlife (Same for all Alternatives)

The cumulative impact area (CIA) for Recreation and Wildlife is the cliffs and canyon country found west of Moab where prime Mexican spotted owl and high value golden eagle habitats as well as crucial bighorn lambing and rutting habitats have been identified. Within the CIA there are numerous areas that offer a variety of recreational opportunities, including aerial and roped activities, camping, trails for backcountry touring with OHVs, motorcycles, and mountain bikes, hiking and viewing opportunities and other activities. (See Map 4 in Appendix C for the Cumulative Impact Area).

The CIA is defined by large topographic features of similar ecological and economical values to the project area; the project area totals 9 percent (10,044 acres) of the CIA's 112,519 acres. The CIA offers approximately 52,000 acres of suitable geological and topographical structure to support roped and aerial activities, 23 percent of the Moab Field Office with the project area containing 12 percent of the suitable geological and topographical structure found in the CIA. Those seeking additional roped and aerial activities could also travel outside of the CIA, but the CIA offers a unique red rock canyon experience with long history of remote outdoor opportunities.

The majority of the Potash bighorn sheep herd is not expected to move outside the CIA for lambing and rutting activities and local eagles and raptors currently nesting in the Project Area are not expected to nest outside of the CIA.

The CIA consists of approximately 94,090 acres (84%) of BLM lands, 13,336 acres (12%) of SITLA and State park lands and 5,093 acres (5%) of privately owned lands.

Past and Present Actions (Same for All Alternatives and all Issues)

Past and present activities in this area have included grazing and mineral exploration, and, more recently, recreation activities. A developed boat ramp, toilet and parking area is found at Mineral Bottom, and a toilet facility is located at the top of the switchbacks on the Mineral Bottom Road. Roped and aerial activities are currently restricted on a total of 36 acres in the CIA (the areas around Gemini Bridges and Corona Arch). Special recreation permit holders have also been subject to limitations on roped and aerial activities.

Past or present actions that affect the same components of the environment as the project area in the CIA include livestock grazing, exploratory drilling for oil and gas, minerals exploration, past uranium and copper mining, geophysical surveys for oil and gas, and exploratory drilling for potash (potassium salts) and lithium, wildlife use, and recreational activities.

Livestock grazing has taken place in the CIA for more than 100 years. Both cattle and sheep have been grazed within the CIA; currently only cattle are grazing in the CIA. (Domestic sheep permits have not been issued since the 1970's to protect desert bighorn sheep.) Fence lines have been in place for decades and surface disturbances from them has had ample time to re-vegetate, so forage availability is not affected.

There has been exploration and development for leasable minerals, including oil and gas, in the CIA since at least the 1920's. All BLM lands within the CIA are currently available or under lease with 93,747 acres (99.6 %) under a stipulation that applies no surface occupancy limitations, meaning that any development must not result in surface disturbance or permanent structures. This stipulation was developed in the 2008 RMP and updated in the 2016 Master Leasing Plan to protect crucial lambing, rutting and year-round use in the highest quality habitats in the Moab Field Office. Additionally, the 2008 RMP precluded all surface disturbing activities, structure, or permanent occupancy of the surface by all other resources and uses in this same area. Potash, a leasable mineral, is found in the CIA. The Intrepid Potash Mine is an active potash development facility operating on the east side of Canyonlands National Park on state and private lands. There has been no development of potash operations on BLM lands.

Mineral exploration and development have occurred throughout this area historically, especially for uranium. The activity associated with uranium exploration and mining was particularly intense in the 1950s and 1960's. There are hundreds of abandoned mining claims and developments throughout the CIA. There is a current interest in lithium that is found in the CIA.

The entire CIA offers nesting and foraging habitats for Mexican spotted owls, golden eagles and a variety of other raptors, with the greatest concentration of raptors and eagles at the heads of Mineral, Spring, and Hell Roaring canyons and along the rims of the Shafer Basin. The entire CIA supports crucial lambing and rutting habitats for the desert bighorn Potash herd. In 1964, there were approximately 100 desert bighorn sheep remaining in the park and on the adjacent BLM lands. To protect these animals BLM lands that border the park limited grazing leases to cattle

only to reduce disease transmission to native bighorn sheep. Currently there are roughly 130 desert bighorn sheep on BLM lands (Potash herd) where the CIA is located.

In the past decade, tourism in the Moab Field Office has increased over 58% to 1.9 million visitors in 2019, and over 72% in Canyonlands National Park. Past recreational use throughout the CIA area has included primitive motorized experiences (touring the backcountry using four wheel drive vehicles, dirt bikes, and OHVs), hiking and canoeing. Currently the CIA sees very high levels of recreation, including use of recreation facilities, established mountain bike, hiking and motorcycle trails, canoeing, hot-air balloon tours, BASEjumping, climbing, ziplining, space-netting, high-lining, slacklining, climbing, rappelling, rope swinging and other roped and aerial activities. Seven and a half miles of State Scenic Byway 313 pass through the eastern portion of the CIA, 41 miles of maintained non-paved roads provide easy access by car to the world class views and scenery in the CIA, and 272 miles of unmaintained roads offer an wide variety of experiences to OHVs and four-wheel drivers. Within the CIA, there are remote, isolated areas that are difficult to access or where road access is not available; these areas receive minimal recreational use.

Reasonably Foreseeable Action Scenario (Same for All Alternatives and all Issues)

The following RFAS identifies reasonably foreseeable future actions that would cumulatively affect the same resources in the CIA as the two action and the No Action alternatives.

Livestock grazing for cattle within the CIA area is not expected to change. Exploration and development for leasable minerals in the CIA would continue, but the No Surface Occupancy stipulation that is in place on over 99% of the CIA would limit the majority of development in the CIA. The Intrepid Potash Mine on private and state land would remain active but no mining expansion is expected.

Apart from within the Wild and Scenic River designation along the Green River, there is no limitation on locatable minerals, although demand for these minerals is currently low. Abandoned uranium mines in Mineral and Hell Roaring canyons are scheduled to be closed in 2020 or 2021, resulting in short term and transient disturbances in the immediate area. The demand for lithium is unknown at this time.

Recreational growth in the Moab Field Office over the next decade is likely to increase, but the exact rate of increase is unknown. There is evidence that recreation growth is leveling off from the rate of increase seen in the 2009-2019 decade. However, there may be an increase in certain niche activities, such as roped and aerial activities, as more people discover Moab as a venue for this type of recreation. This could result in expansion of this type of use into outlying areas. Within the CIA, remote, isolated areas that are typically difficult to access or where road access is not available could see increased use as people pioneer new venues for roped and aerial activities.

Recreation

Recreation activities in the area are expected to increase as the popularity of Moab continues and as people seek recreation alternatives to the more crowded areas surrounding Moab. As the project area is particularly suitable for roped and aerial activities, these activities are also expected to increase primarily because of the presence of good access roads and the needed geological and topographical structure.

Under Alternative A, roped and aerial enthusiasts would be denied an area of just over 10,000 acres (12% of CIA), on which to expand their chosen activities. However, as there are no current

plans to further restrict these activities, other venues would remain open to roped and aerial activities throughout the Moab Field Office; there are over 215,000 acres of canyon and red rock formation that offer needed geological and topographical structure for the development of new locations for roped and aerial activities. Alternative A would reduce roped and aerial opportunity by 4.5% in suitable areas and reduce existing climbing by 2.8% (0.6% of routes identified on Mountain Project) within the Moab Field Office.

Under Alternative B, climbers would retain limited, seasonal access to climbing venues as well as to over 215,000 acres of canyon and red rock formation to expand roped and aerial activities. Alternative B would reduce the potential for expansion of roped and aerial opportunity by 12 percent in the CIA, 4.5 percent in suitable areas and seasonally limit climbing on 2.8 percent of the mapped climbs (0.6% of routes identified on Mountain Project) within the Moab Field Office.

Under Alternative C (No Action), the cumulative effect of reduced wildlife populations on wildlife viewers and hunters would continue to increase as animals would be increasingly difficult to locate. Opportunities for the once-in-a-lifetime desert bighorn ram sheep hunt would be lessened.

The cumulative effect upon those who engage in roped and aerial activities from the loss of six known climbs (3% of mapped climbs) and limitations on 10,044 acres which includes 12 percent of the CIA and only 6 percent of desirable climbing geology of BLM lands in remote canyon areas would be small and confined to one area.

3.2. Issue 2: Mexican Spotted Owl

Threatened and Endangered Species: Mexican Spotted Owl - Issue 2	Mexican spotted owls nest in these canyons. This species is particularly sensitive to disturbances. Roped and aerial activities directly impact the environment that they need for survival.
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3.2.1 Affected Environment – Mexican Spotted Owl

Currently various animal species residing in the upper portions of Mineral and Hell Roaring canyons have minimal potential for human disturbance. However, the growing interest in recreation activities that occur on the canyon walls and along the rims of these canyons has the potential to negatively impact species relying on the remote nature of this area for survival.

The Mexican spotted owl (MSO) was listed as a threatened species in 1993. Immediately following its listing, a team was appointed to develop the Mexican Spotted Owl Recovery Plan. The Recovery Plan was completed in 1995.

The Endangered Species Act (ESA) makes it unlawful for a person to take a listed animal without a permit. “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” Through regulations, the term “harm” is defined as “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”

Protecting Mexican spotted owls and their habitats is consistent with BLM policy; BLM Manual 6840.02 Objectives - A. *To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species.* 6840.1A.

Section 2 (Findings, purposes, and policy). *The BLM shall, consistent with Section 2 of the ESA, seek to conserve endangered and threatened species and shall utilize its authorities in furtherance of the purposes of the ESA.*

The Mexican Spotted Owl Recovery Plan (Recovery Plan) described owl habitat as deep, steep-walled canyons and hanging canyons. Nesting and roosting in Utah occurs in caves and on ledges in this canyon habitat. These canyons are typically surrounded by terrain that does not support breeding owls. The Recovery Plan recognizes two Mexican spotted owl habitat models and recommends a multi-tool approach, using these models for large scale planning efforts and to identify possible areas that may provide nesting and roosting habitat where nests may be located (USFWS 1995).

According to these MSO habitat models, 1,502,600 acres (1,432,390 acres on federal lands) of potential habitat can be found within the Moab Field Office. In 1999, the Moab Field Office initiated an extensive habitat assessment program and to date the entire field office has had some level of habitat evaluations; most areas with suitable habitats have had multiple surveys over the past 20 years. This extensive habitat evaluation and survey schedule has allowed the Moab Field Office to identify and manage approximately 395,000 acres of suitable habitats, reducing modeled projection by 73%. Within the Moab Field Office, 20 years of extensive protocol surveys on over 350,000 acres has identified three nest sites; the Big Chief nest which has been active every year since 1999, the Hell Roaring nest which has been active since 2012, and was active in 2019, and a third nesting area detected in 2013, the Lions Mesa nest. Current 2020 status is not yet known.

The Hell Roaring nest is within the project area and the Big Chief nest is nine miles to the southeast, protected by a locked gate on private property. The entire project area is considered prime, high quality nesting habitat for the Mexican spotted owl and is on a protocol survey schedule that consists of four surveys per year for two years followed by one survey per year for two years; this schedule is then repeated.

In areas that contain suitable habitat for MSO or designated Critical Habitat, the Moab RMP (2008) directs the Moab BLM that actions will be avoided or restricted that may cause stress and disturbance during nesting and rearing of their young. The direction includes the preclusion of activities that would 'harm' essential behavioral patterns, including breeding, feeding, or sheltering during the nesting season, which is from March 1 through August 31.

Human disturbance is a primary threat to raptor populations that may generate a range of adverse impacts to the fitness, occupancy, and population rates of golden eagles, Mexican spotted owls, and other raptors depending on the type of disturbance (Hansen et al. 2017, Romin and Muck 2002). It is documented that rock climbing activities impact cliff-nesting raptors when activities are in close proximity to nests because of shouting and other noises involved with the activity, and the high sensitivity of birds to human activities occurring above them (Hansen et al. 2017). Other roped and aerial activities likely impart a similar level of impact to raptors when these activities occur in close proximity to nests (USFWS 2020).

Additionally, most radio-marked adult Mexican spotted owls have been found to remain on or near their breeding territory throughout the year, although some territorial owls migrated during winter. Migrating radio-marked owls typically left study areas [breeding area] in November or December and returned from January to April. Distances moved typically range from 5 to 50 km (3 to 31 miles) (Willey 1998a, Ganey and Block 2005). Winter is a period of energetic stress for many birds (e.g., Greenwood and others 1992, Newton 1998) and may be a critical period for these owls

as well. For example, 9 of 11 mortalities documented in studies of radio-marked spotted owls in Arizona and New Mexico occurred from November through February (J. L. Ganey, unpublished data).

3.2.2 Environmental Impacts

3.2.2.1 *Impacts of the Alternative A – Year Round Management*

Alternative A would utilize proactive management strategies, as directed in the 2008 RMP (REC-3), to implement management methods to protect special status species, including the Mexican Spotted Owl. Alternative A would also support the BLM Mission by sustaining the health, diversity and productivity of the ESA threatened Mexican spotted owl on 10,044 acres of prime and crucial habitats in Mineral and Hell Roaring canyons. Alternative A would further the enjoyment of wildlife among present and future generations of people.

Recreational activities may affect owls directly through disturbances caused by human activity or indirectly through alteration of habitats such as damage to vegetation, soil compaction, illegal user created trail tracks, and increased risk of wildland fires. Whether managed or unmanaged, development of new recreational facilities, destinations, and expansion of existing facilities may alter owl habitat. (USFWS 2012).

Currently, Hell Roaring Canyon is home to one nesting pair of Mexican spotted owls; the entirety of Mineral and Hell Roaring canyons offers prime expansion areas available for future nesting pairs as they disperse from one of the two nests in the area. With juvenile survival rates as low as 11%, it is vital to have suitable expansion habitats in the area.

According to Swarthout (2000), owl responses to hikers depend on a complex interaction of variables associated with the encounter and are most likely influenced by their previous experience with humans. Perch height, however, largely explained whether or not owls flushed in response to an approaching hiker; as owls perched higher, they were less likely to flush, a relationship identified in other raptors (Holmes et al. 1993, Steidl and Anthony 1996) and largely determined the distance at which adults flushed and the duration of their response as each of these responses increased with higher perch heights. Higher perches afford greater visibility of approaching disturbances at greater distances, which has been shown to increase flush response rate and flush distance in bald eagles (Steidl and Anthony 1996). Furthermore, female owls that nested in higher locations changed their activity budgets in response to hikers, more so than females that nested in lower locations (Swarthout 1999). Roped activities would be expected to create more frequent response and possible great distances of movement and longer periods of displacement as these activities bring human encroachment closer to roosts and nesting sites located high on the cliff walls where owls would otherwise not be directly impacted.

There are direct costs associated with responding to disturbance, such as energy demands of avoidance flight and time lost that would be allocated to other activities, such as incubation and tending to young. Mexican spotted owls have a narrow thermal neutral zone (Ganey et al. 1993) and consequently are found in cool microclimates (Rinkevich and Gutierrez 1996). Energetic demands of avoidance flights increase heat production, which may be exacerbated by flying during the day, and which could increase heat-related stresses. Flushed owls vacate their selected roosts and nest sites that likely meet their thermoregulation requirements, perhaps forcing them to occupy roosts that may not meet these demands as effectively or leaving eggs and juveniles unprotected and susceptible to exposure and predation.

Alternative A would create positive direct impacts to Mexican spotted owl by eliminating the potential for roped and aerial delivery activities to disturb Mexican spotted owl that occupy the area, ensuring their energetic demands are met and their eggs and young remain protected and energetic stress does not increase during the winter months when the known pair and their juveniles may further utilize this area. Indirect impacts would result in ensuring over 10,000 acres of prime Mexican spotted owl nesting habitats are managed so that recreation growth would not negatively impact the potential for Mexican spotted owls to expanded into suitable habitats in Mineral and Hell Roaring canyons.

3.2.2.2 Impacts of Alternative B – Year Round Management with the Issuance of Seasonal Climbing Permits for Selected Climbs

The impacts under Alternative B would be similar to those found in Alternative A, except some limited climbing use would be allowed seasonally in Hell Roaring Canyon.

As discussed in Alternative A, recreational use is limited in the project area; it is reasonable to assume that without proactive management, recreational use would expand into Mineral and Hell Roaring canyons.

Implementing seasonal climbing restrictions that limit permit location, numbers and group size to six specific climbing locations (Witch, Warlock, Gollum, Cauldron, North and South Kachina Spires) would create positive direct impacts to nesting Mexican spotted owls by eliminating the potential for climbing activities to disturb nesting Mexican spotted owl (because no permits would be issued during nesting season). Alternative B would eliminate additional or new roped and aerial delivery activities that also impact nesting Mexican spotted owls, as discussed in Alternative A. Alternative B does not preclude energetic stress during the winter months when the known pair and their juveniles may utilize this area.

Alternative B would reduce the potential for expansion of additional activities that could directly and indirectly impact nesting Mexican spotted owl habitats and the active nest, as discussed in Alternative A.

Alternative B would create positive direct impacts to nesting Mexican spotted owl by eliminating the potential for roped and aerial delivery activities to disturb nesting Mexican spotted owl that occupy the area, but does not preclude potential energetic stress from existing climbing activity during the winter months when the known pair and their juvenile may utilize this area. Given that the Mexican spotted owl juvenile survival rate can be as low as 11%, and high mortality is known to occur during the winter months, Alternative B provides less overall proactive management strategies than Alternative A and may result in direct and indirect impacts from the continuation of climbing use that may result in energetic stress during the winter months to the known pair or their juveniles that may remain in the area after fledging.

3.2.2.3 Impacts of the Alternative C – No Action Alternative

The No Action alternative would not facilitate proactive management strategies, as directed in the 2008 RMP (REC-3), for special status species and wildlife habitat. The project area currently receives minimal use except for the Green River corridor. It is reasonable to assume that the No Action alternative would result in the expansion of roped and aerial activities into Mineral and Hell Roaring canyons and thus into prime MSO habitats.

The No Action alternative would allow the continuation and expansion of roped and aerial activities into an area that currently sees relatively low levels of human pressure. Due to the minimal human activity in the area, habitats for Mexican spotted owls remain largely intact, which has resulted in occupied nesting of one Mexican spotted owl pair. This occupied nest is in the direct vicinity of several climbing locations (the Witch and the Warlock and Gollum). Human activity involving roped and aerial activities is expected to increase and expand into other areas that are also near the MSO nest.

As discussed in Affected Environment above, owl responses such as increased flush response rate and distance is likely influenced by their previous experience with humans and perch. Direct costs associated with responding to disturbance may result in decreased time incubating and tending to young, leaving eggs and juveniles unprotected and susceptible to exposure and predation as well as to increases in heat-related stresses from being flushed from cool microclimates to roosts that may not meet thermoregulation needs (Holmes et al. 1993, Steidl and Anthony 1996, Ganey et al. 1993, Rinkevich and Gutierrez 1996). The No Action alternative allowing roped and aerial activities would be expected to create more frequent response and possibly greater distances of movement and longer periods of displacement as these activities bring human encroachment closer to roosts and nesting sites on cliffs and canyon walls where owls might otherwise not be directly impacted.

The No Action alternative would allow the continuation of several climbs and allow for the expansion of additional activities that would directly impact an active nest, resulting in a 'take' of an endangered species. Direct impacts to nesting Mexican spotted owl would include increasing avoidance flights in response to human activities, resulting in increased energetic demands, increased heat-related stresses, and increases in potential for nest failure due to exposure and predation. Given that the Mexican spotted owl juvenile survival can be as low as 11%, limiting nest success further reduces potential population growth. Winter is a period of energetic stress for many birds (e.g., Greenwood and others 1992, Newton 1998); the No Action alternative would allow for increased potential of energetic stress to the known pair or their juveniles that may remain in the area after fledging.

Indirect impacts of the No Action alternative would result in over 10,000 acres of prime Mexican spotted owl nesting habitats managed with no limitations on roped or aerial activities. Thus, human encroachment as a result of growing recreation activities would impact the potential for Mexican spotted owls to expand into the suitable habitats found in Mineral and Hell Roaring canyons.

The No Action alternative would not secure sensitive wildlife habitats in an area that currently functions as source habitat (high quality habitat that on average allows the population to increase). These important canyons currently are functional source habitats (high quality areas where birth rates were greater than death rates, causing the population to grow, resulting in emigration to other areas), but as habitat fragmentation and human disturbances increase, these areas could become a sink habitat (very low quality habitat that, on its own, would not be able to support a population). As a result, the species may become reduced or locally extirpated.

The No Action alternative does not support BLM policy directing the BLM to conserve ESA-listed species and the ecosystems on which they depend by utilizing its authorities in furtherance of the purposes of the ESA.

3.2.1.1. *Cumulative Impact*

Cumulative Impact Area (CIA) for Recreation and Wildlife (Same for all Alternatives)

The cumulative impact area (CIA) for Recreation and Wildlife is identified in Section 3.1.2.4 and the map is Appendix C (Map 4)

Past and Present Actions (Same for All Alternatives)

Past and present activities in the CIA for area is identified in Section 3.1.2.4.

Reasonably Foreseeable Action Scenario (Same for All Alternatives)

Section 3.1.2.4 identifies reasonably foreseeable future actions that would cumulatively affect the same resources in the CIA as the two action and the No Action alternatives.

Mexican Spotted Owl

As noted above, aerial and roped activities are expected to increase as proponents seek less crowded and novel alternatives. The entire CIA supports prime Mexican spotted owl nesting and foraging habitats.

Within the CIA, Alternative A would limit the expansion of roped and aerial activities on about 10,000 acres, where there is known nesting of Mexican spotted owls. Under Alternative A, vigilance and flight responses of Mexican spotted owls would be expected to be reduced; rates, energy budgets and caloric consumption would improve population fitness within the project area, resulting in continued genetic connectivity and population dispersal throughout the CIA.

Within the CIA, Alternative B would seasonally allow climbing use at six specific locations and limit the expansion of roped and aerial activities outside of these climbing areas on about 10,000 acres. As discussed above, this area supports Mexican spotted owls. Under Alternative B, vigilance and flight responses of Mexican spotted owls would be expected to continue at current rates, energy budgets and caloric consumption would maintain population fitness resulting in continued genetic connectivity and population dispersal throughout the CIA.

The No Action alternative would allow for roped and aerial activities to continue and expand into the remote areas of these two canyons. Extensive research, discussed previously, indicates that human activities increase vigilance and flight of Mexican spotted owls. As these activities expand into the remote areas of these two canyons, vigilance and flight response is expected to increase energy expenditures and reduce potential for caloric consumption, potentially reducing population fitness resulting in a loss of genetic connectivity and population dispersal throughout the CIA.

3.3 Issue 3 - Golden Eagles and other Raptors

Raptors, including
Golden Eagles – Issue
3

Golden Eagles are a species of concern; they nest in these canyons. This species is particularly sensitive to disturbances. Other raptors also utilize the canyons for nesting and foraging habitat. Roped and aerial activities directly impact the environment that raptors need for survival.

3.3.1 Affected Environment- Golden Eagles and Other Raptors

Each raptor nest, offspring, and supporting habitats are considered important to the long-term viability of raptor populations and are vulnerable to disturbance by many human activities (Romin and Muck 2002). The steep canyon walls, remote nature, and increased prey potential due to the

proximity to the Green River make this area prime nesting and year-round habitat for a variety of raptors, including the golden eagle. Over 40 nests belonging to golden eagle, peregrine and prairie falcon, red-tailed hawk and great horned owl have been identified in the project area since 1998. Map 5 found in Appendix C illustrates nesting habitat within the Project Area. Beginning in 2008, additional monitoring efforts through the Raptor Inventory Nest Survey (RINS) program identified 70 additional raptor nest sites in Mineral Canyon; Hell Roaring has not yet had intensive RINS inventories but similar results are expected.

Overall, raptors display a high degree of fidelity to nest sites and nesting territories (Newton 1979). Certain physiographic features such as elevation, slope, aspect, habitat diversity, prey availability, nest height, and nest substrate have been measured in attempts to characterize site selection by nesting raptors (Murphy et al. 1969, Apfelbaum and Seelbach 1983, MacLaren 1986, Kirmse 1994). The majority of raptor species are firmly fixed on a special type of nest site according to a narrow genetical disposition (Kirmse 1994). There is a large body of evidence that supports negative impacts to golden eagle productivity and nesting success from multiple type of recreational activities in occupied habitats.

In the spring 2016, a new golden eagle nest with one chick was identified in Mineral Canyon, approximately 759 yards across a small side canyon adjacent to the Fruit Bowl. The nest was monitored several times during the spring, with noticeable increased visitor and highlining activity at the Fruit Bowl as the weather warmed into spring on the rims across from the nest. In a mid-May monitoring visit, the chick appeared dead on the ledge near the nest and the adult birds were not seen tending to the nest. The nest was monitored for several days until the chick had been scavenged. Adults were not seen at the nest site, or on past perching areas near the nest; the chick appeared to have succumbed to exposure and starvation as the parents avoided the increased activity near the Fruit Bowl.

Based on evidence from various studies that will be further discussed in the Environmental Impacts section below, increased visitation to the canyon rims approximate 0.25 miles across from the nest and in direct line of sight resulted in adults reducing attendance and feeding behaviors which led to excessive exposure and starvation of the eaglet.

Golden eagles and their habitats are protected under the Bald and Golden Eagle Protection Act (1963) (16 U.S.C. 668-668d) (Eagle Act) and the potential for human activities to violate Federal law by taking eagles exists under the prohibitions of the Eagle Act. The Eagle Act defines the “take” of an eagle to include a broad range of actions: “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”

“Disturb” is defined in regulations at 50 CFR 22.3 as: “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” (*Federal Register* /Vol. 74, No. 175 / Friday, September 11, 2009 /Rules and Regulations). Taking action to reduce disturbance to breeding and nesting eagles would help reduce likelihood that BLM, via actions that it allows, would cause a “take” of golden eagles as protected under the Eagle Act. This would include avoiding actions that might “disturb” eagles, as defined at 50 CFR 22.3.

Protecting golden eagle nesting habitat is consistent with BLM policy (BLM Manual 6500). Goal 4 – Raptor Habitat Management of BLM Manual 6500 directs the agency to “provide suitable

habitat conditions for birds of prey through the conservation and management of essential habitat components, including habitat for prey species, especially in areas where birds of prey concentrate during some period of the year, or in important habitats where populations are suppressed.”

Golden eagles are long-lived raptors that maintain nesting territories that may be occupied for a century or longer. Within occupied nesting territories there is one nest in which eagles lay their eggs in a given year (i.e., the used nest), but there are usually other nests within the area (i.e., alternative nests) (Millsap 2014).

Assessments of golden eagle populations in the western United States suggest stable or declining populations (Kochert and Steenhof, 2002; Hoffman and Smith, 2003; Millsap et al., 2013). Maintaining the quality of existing habitat has been deemed important to long-term population viability (Kochert et al., 2002). Golden eagles are considered to be sensitive to human disturbance (Kochert & Steenhof, 2002; Whitfield et al., 2004). Human disturbance has been implicated in reduced eagle nesting productivity (Boeker & Ray, 1971). Maintaining habitat and populations in areas free from human disturbance is considered an important component of golden eagle conservation (Kochert & Steenhof, 2002).

Besides habitat loss and modification, human activities and development have frequently resulted in disturbances at wintering locations and aborted or reduced nesting attempts. Studies of human disturbances at winter roosting areas have mostly concerned bald eagle responses. Human disturbances may constitute a threat to wintering eagle populations by causing displacement to areas of lower human activity (Shea 1973, Servheen 1975, Stalmaster 1976, Stalmaster and Newman 1978, Brown and Stevens 1997). Human disturbances may also interfere with foraging behavior of eagles (Mathiesen 1968, Stalmaster 1976).

Human disturbance is a primary threat to raptor populations that may generate a range of adverse impacts to the fitness, occupancy, and population rates of golden eagles, Mexican spotted owls, and other raptors depending on the type of disturbance (Hansen et al. 2017, Romin and Muck 2002). It is documented that rockclimbing activities impact cliff-nesting raptors when activities are in close proximity to nests because of shouting and other noises involved with the activity, and the high sensitivity of birds to human activities occurring above them (Hansen et al. 2017). Other roped and aerial activities likely impart a similar level of impact to raptors when these activities occur in close proximity to nests (USFWS 2020).

In the Moab Field Office, golden eagles and other raptors commonly nest on canyon walls near areas that also attract various roped and aerial types of recreational activities. Steenhof et al. (2014) showed that the number of young eagles produced per nesting was significantly lower in areas with relatively higher trail density and off-road vehicle traffic compared to areas with fewer trails or less off road vehicle traffic.

Due to the current low recreational use in Mineral and Hell Roaring canyons, golden eagle and raptor habitats remain highly suitable for current and future use by these birds. The Utah Field Office of the U.S. Fish and Wildlife Service provides guidelines for raptor protection from human and land use disturbances (Romin and Muck, 2002). These guidelines recommend seasonal protective buffers for golden eagles from January 1 through July 31 and for most other raptors from March 1 through August 31. Furthermore, these guidelines indicate that protection of nesting, wintering and foraging activities are considered essential, and recommend spatial buffer zones for activities occurring proximal to raptor winter concentration areas from November through March.

3.3.2 Environmental Impacts

3.3.2.1 *Impacts of the Alternative A – Year Round Management*

Alternative A would utilize proactive management strategies, as directed in the 2008 RMP (REC-3), to implement management methods to protect golden eagles and other raptors during the nesting season and throughout the winter months, as recommended by U.S. Fish and Wildlife Service.

Golden eagles are considered to be more sensitive to human disturbance than many other raptor species. Maintaining habitat and populations in areas free from human disturbance is considered an important component of golden eagle conservation (Kochert & Steenhof, 2002). Protection of both occupied and unoccupied nests is important since not all raptor pairs breed every year or utilize the same individual nest within a nesting territory (Scott 1985). Individual raptor nests left unused for a number of years are frequently reoccupied. For instance, non-use may occur over one prey fluctuation period ($7 \pm$ years) for species such as golden eagles or ferruginous hawks. Successful habitat management should be complemented by efforts to attain natural or pre-development nesting success of local raptor populations and protection of winter roosting activities. (Romin and Muck 2002)

Alternative A would create direct positive impacts to eagle and raptor habitats by ensuring the continuation of nesting opportunities for golden eagles and other raptors by precluding roped and aerial recreation, as well as precluding the installation of temporary structures or facilities. Outside of the Mineral Bottom BASEjumping Focus Area and the Fruit Bowl, no well-known climbing routes exist in Mineral Canyon. In Hell Roaring Canyon there are six climbing routes that are minimally used. Precluding roped and aerial activities, as well as temporary structures or facilities would eliminate current, low levels of human impact and allow to the Moab BLM to adequately manage an area that provides suitable, remote nesting, rearing and foraging areas for golden eagles and a variety of raptors. As other backcountry habitats for these species undergo growing human pressure, Mineral and Hell Roaring canyons would be able to maintain current nesting, foraging and winter and habitat potential that would secure populations of these species into the future.

The Tolerance in Raptors and the Associated Impacts of Leisure Sports (TRAILS) is an Individual-based models (IBMs) that offers a way to assess population-level, aggregate effects of disturbance on wildlife. IBM model that simulates interactions between recreationists and nesting raptors, assesses the effect of human disturbance on raptor populations and tests if changes in tolerance to disturbance could mitigate negative consequences. TRAILS modeling results suggests that human disturbance from increased recreational activity across the U.S. could have long-term, population-level effects on golden eagles in the absence of significant management actions to control disturbance (Pauli et al 2016). In Pauli et al (2016), a 1% annual increase in recreation resulted in negative population growth rates and substantially decreased eagle population size compared to no annual increases in recreation; a 3% annual increase in recreation resulted in the local extinction of eagles within 100 years in most simulations. Alternative A would create indirect impacts over time by insuring 10,044 acres of prime raptor habitats are managed so that recreation growth in the Moab area would not negatively impact current habitats and nesting territories.

3.3.2.2 Impacts of Alternative B- Year Round Management with the Issuance of Seasonal Climbing Permits for Selected Climbs

Alternative B would utilize seasonal proactive management strategies, as directed in the 2008 RMP (REC-3) and would also support the BLM Mission by sustaining the health, diversity and productivity of the golden eagles and other raptors in Mineral and Hell Roaring canyons.

As discussed in Alternative A, recreational use is currently limited in the project area and it is reasonable to assume that without proactive management, recreational use would expand into Mineral and Hell Roaring canyons.

Implementing seasonal climbing restrictions that limit permit location, numbers and group size to six specific climbing locations (Witch, Warlock, Gollum, Cauldron, North and South Kachina Spires) would create positive direct impacts to nesting eagles and raptors by eliminating the potential for climbing activities to disturb nesting eagles and raptors. Alternative B would also eliminate additional or new roped and aerial delivery activities, therefore reducing additional or new impacts to nesting eagles and raptors, as discussed in Alternative A. Alternative B does not preclude climbing use at the aforementioned locations near nesting territories during the winter months when wintering and young of the year eagles and raptors may utilize this area.

Alternative B would reduce the potential for expansion of additional activities that could directly and indirectly impact nesting eagles and raptors habitats, as discussed in Alternative A.

Alternative B would create positive direct impacts to nesting eagles and raptors by eliminating the potential for new roped and aerial delivery activities and restricting current use to outside the nesting season, but does not preclude climbing activity at those six locations during the winter months. Alternative B provides fewer overall proactive management strategies than does Alternative A and may result in direct and indirect impacts from the continuation of climbing use during the winter months in permitted areas.

The impacts of Alternative B would be similar to the direct and indirect impacts discussed in Alternative A during the seasonally restricted periods. Outside of the seasonally restricted period the impacts would be similar but smaller in size, duration, and type than those discussed in the No Action Alternative.

3.3.2.3 Impacts of the Alternative C – No Action Alternative

The No Action alternative would not facilitate proactive management strategies, as directed in the 2008 RMP (REC-3), for special status species and wildlife habitat. The project area currently supports minimal recreation use except for the Green River corridor, the Mineral Bottom BASEjumping Focus Area and more recently at the Fruit Bowl. It is reasonable to assume that the No Action alternative would result in the expansion of roped and aerial activities into Mineral and Hell Roaring canyons.

The No Action alternative would allow the continuation and expansion of roped and aerial activities and delivery into an area that currently receives low levels of human pressure. Due to the minimal human activity in the area, habitats for golden eagles and other raptors remain largely intact. As recreation activities increase, major consequences to golden eagle and raptor populations are expected.

Within occupied territories, visitation by pedestrians during the early portion of the breeding season negatively influenced the likelihood of golden eagles laying eggs, resulting in some

territories being occupied by eagles that made no detectable breeding attempt. Adverse responses to pedestrians and nonmotorized riders before the mean egg-laying date support the hypothesis that large raptors may be particularly vulnerable to disturbance at this crucial time (Watson, 2010).

At occupied territories in the Owyhee BLM Field Office, early season pedestrian use and other nonmotorized use reduced the probability of egg-laying. Pedestrians, who often arrived via motorized vehicles, were associated with reduced nest attendance, an important predictor of nest survival. (Spaul and Heath 2016). Nest-cliff height and the nest-trail height did not influence nest survival. This suggests that cliffs lying on lower rock outcrops are not less productive nesting sites than those lying on high cliffs or canyons. Furthermore, nesting sites that are vertically further from trails may be as susceptible to human disturbance as sites with less vertical separation. (Spaul and Heath 2016).

In Spaul and Heath (2016), at occupied territories, pedestrian and other non-motorized traffic were negatively associated with the probability that an eagle pair would lay eggs. At territories where eagles laid eggs, nest survival was negatively associated with short-term peaks in motorized traffic. Adult nest attendance during the incubation and brood rearing periods, an important predictor of nest survival, was negatively associated with pedestrian use (Spaul and Heath 2017). Studies of other eagle species suggest that type of human activity, season, and proximity may all influence the flushing probability and distance at which flushing occurs (Grubb and King 1991, Steidl and Anthony 1996, Gonazales et al. 2006). Taken together, these results suggest that disturbance from several forms of recreation may impact nesting success.

In Spaul and Heath (2017) three eagles in the study area flushed from nests due to recreational activity where no adult returned to the nest for more than 90 minutes, long enough to potentially contribute to reproductive failure because of reduced egg viability (Driscoll et al.1999), heat exposure (Beecham and Kochert 1975) or increased predation risk (Stien and Ims 2016). At one of these three nests, where the flushed eagle was feeding a nestling, that nestling subsequently died, though it is unclear whether disturbance was the direct cause of nest failure. Flushing in response to recreationists is consistent with a negative association between Golden Eagles' nest attendance and pedestrian activity, which could lead to reduced nest survival (Spaul and Heath 2016) or reduced productivity (Steenhof et al. 2014).

Golden eagles were more likely to flush when perched away from their nests than when at their nests (Spaul and Heath 2016). Previous studies suggest this trend occurs in many avian taxa (Livezey et al. 2016), and results are consistent with bald eagles in Arizona and Alaska that were less likely to flush while at the nest than while away from the nest (Grubb and King 1991, Steidl and Anthony 1996). If displaced from key hunting areas, the ability of golden eagles to forage effectively and provide for an incubating mate or nestlings may be negatively affected. The increased likelihood of eagles flushing when perched away from nests suggests that recreation disturbance occurs throughout eagle territories and not just at nest sites (Tarjuelo et al. 2015).

The Tolerance in Raptors and the Associated Impacts of Leisure Sports (TRAILS), an IBM model that simulates interactions between recreationists and nesting raptors, assesses the effect of human disturbance on raptor populations and tests if changes in tolerance to disturbance could mitigate negative consequences. TRAILS modeling suggests that human disturbance from increased recreational activity across the U.S. could have long-term, population-level effects on golden eagles in the absence of significant management actions to control disturbance (Pauli et al 2016). In Pauli et al (2016), a 1% annual increase in recreation resulted in negative population growth

rates and substantially decreased eagle population size compared to no annual increases in recreation. Furthermore, a 3% annual increase in recreation resulted in the local extinction of eagles within 100 years in most simulations. Thus, even moderate growth in recreation activity can have major consequences on eagle populations. The No Action alternative would readily facilitate a 4% annual increase in recreation use in the project area; therefore, it is expected that local extinction of golden eagles within 100 years could occur in Mineral and Hell Roaring Canyons.

3.2.1.2. *Cumulative Impacts*

Cumulative Impact Area (CIA) for Recreation and Wildlife (Same for all Alternatives)

The cumulative impact area (CIA) for Recreation and Wildlife is identified in Section 3.1.2.4 and the map is Appendix C (Map 4)

Past and Present Actions (Same for All Alternatives)

Past and present activities in the CIA for area is identified in Section 3.1.2.4.

Reasonably Foreseeable Action Scenario (Same for All Alternatives)

Section 3.1.2.4 identifies reasonably foreseeable future actions that would cumulatively affect the same resources in the CIA as the two action and the No Action alternatives.

Golden Eagle and Raptors

As noted above, aerial and roped activities are expected to increase as those engaged in these activities seek less crowded and novel alternatives. The entire CIA supports high quality eagle and raptor nesting areas. Within the CIA, Alternative A would limit the expansion of roped and aerial activities on about 10,000 acres, where there is known nesting of eagle and raptors. This area also supports a large concentration of successfully productive eagles and raptors that provide population dispersal throughout the area. Under Alternative A, vigilance and flight responses of eagle and raptors would be expected to be reduced; rates, energy budgets and caloric consumption would improve population fitness within the project area, resulting in continued genetic connectively and population dispersal throughout the CIA.

Alternative A would ensure that Mineral and Hell Roaring canyons continue as a functional source population (high quality areas where birth rates are greater than death rates, causing the population to grow, and resulting in emigration to other areas), and allow for emigration into the CIA as well as throughout eagle and raptor habitats in the Moab Field Office. This emigration would support sink population areas where human activities may or have reduced habitat quality and small populations are facing local extirpation.

Within the CIA, Alternative B would seasonally allow climbing use at six specific areas and limit the expansion of roped and aerial activities outside of these climbing areas on about 10,000 acres. As discussed above, this area prime supports eagle and raptors habitats, facilitates genetic connectivity between subpopulations, and supports a large concentration of successfully productive eagles and raptors. Under Alternative B, vigilance and flight responses would be expected to continue at current rates, energy budgets and caloric consumption would maintain population fitness resulting in continued genetic connectively and population dispersal throughout the CIA.

The No Action alternative would allow for roped and aerial activities to continue and expand into the remote areas of these two canyons. Extensive research, discussed previously, indicates that human activities increase vigilance and flight to all mentioned species. As these activities expand into the remote areas of these two canyons, vigilance and flight response is expected to increase energy expenditures and reduce potential for caloric consumption, potentially reducing population fitness, resulting in a loss of genetic connectivity and population dispersal throughout the CIA.

The No Action alternative would not ensure Mineral and Hell Roaring canyons would continue as a source population. Without emigration from this area, sink populations where human activities may or have reduced habitat quality and small populations may face local extirpation.

3.4 Issue 4 – Desert Bighorn Sheep

Desert Bighorn Sheep – Issue 4	The desert bighorn sheep herd in this area is of particular concern. Roped and aerial activities directly impact the environment that these sheep need for survival.
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3.4.1 Affected Environment

Desert bighorn sheep (*Ovis canadensis nelsoni*) are a subspecies of bighorn sheep that are specifically adapted to an arid environment. Native American rock art dating back 2,000 to 4,000 years ago records the presence of desert bighorn sheep in the project area. European explorers in the late 1600s estimated more than two million desert bighorn once roamed the southwest. By the late 1800s however, bighorn sheep had almost disappeared in their historical habitats. Extremely vulnerable to diseases from European livestock, wild sheep populations were decimated by pathogens like scabies (an ear mite) and anthrax (a bacterial disease) introduced by domestic sheep. Bighorns were also hunted by early explorers, settlers and trophy hunters. Increased competition with domesticated livestock for food and water resources exacerbated the situation.

Through 1940s and 1950s, Utah's desert bighorn sheep populations struggled to survive as uranium exploration on the Colorado Plateau opened access to remote areas and drove desert bighorns from their traditional ranges. By the 1960s, only a small population of desert bighorns remained along the most remote portions of the Colorado and Green Rivers. This herd is known by two names: the Canyonlands herd (those animals within the National Park) and the Potash herd (those animals on BLM land north and east of the Park). This group of desert bighorn sheep is the only remaining native herd (that is, non-transplanted) in Utah and one of just a few throughout the west. Although the two herds have different names, they intermingle freely. Not only do these herds provide important genetic contributions to science and wildlife management, but they have persisted through the onslaughts of disease, competition with domestic livestock, and unregulated hunting over the past 100 years, thus resulting in superior genetics and providing today's recreationalist and wildlife enthusiast the rare treat of viewing the magnificent animals that have occupied the red rock canyons long before our ancestors explored these public lands.

When Canyonlands National Park was established in 1964, there were approximately 100 desert bighorn sheep remaining in the park and on the adjacent BLM lands. To protect these animals, grazing allotments within the park were phased out during the 1970s and BLM lands that border the park limited grazing leases to cattle only (cattle do not transmit diseases to native sheep). This was probably the most important step in preserving bighorn populations in the area at the time. In

the early 1980s, biologists began relocating desert bighorn sheep from the growing population in Canyonlands National Park in order to establish new herds in areas such as the Arches National Park, Capitol Reef National Park, Glen Canyon National Recreation Area and the BLM's San Rafael Swell. Today desert bighorn populations in Utah are estimated at 3,000 animals and local bighorns have spread out from Canyonlands to over 300,000 acres of public lands in the Moab Field Office area to the north and east of the park. Currently there are roughly 350 desert bighorns in Canyonlands National Park (Canyonlands herd) and another 130 bighorns on adjoining BLM lands (Potash herd). In addition, over 214 desert bighorn sheep have been relocated from the Canyonlands herd and 91 have been relocated from Potash herd to other areas in Utah to help reestablish desert bighorn population within the state. These relocations started in 1984 with the most current relocation occurring in 2008.

Desert bighorn sheep herd distribution is associated with steep, rugged terrain as bighorn use their climbing abilities to escape predation and perceived threats. Evasion behavior of bighorn is dependent on escape terrain and the ability to visually detect danger at a distance. Therefore, preferred habitats include areas with high visibility, low vegetative density and within 300 meters (or bordered on both sides by 1,000 meters) of 27-85 degree slopes that they utilized as escape terrain. Escape terrain provides desert bighorn sheep with the ability to evade predation, seek refuge from disturbances and offers thermal cover from summer heat and winter weather. Though historically bighorn utilized valley floors, mesa tops and other areas that provide nutritious and higher protein lower elevation grasses, bighorn now tend to reside and forage solely in escape terrain habitats due to human activity and domestic livestock pressures.

The talus slopes and cliffs of the canyon country in the Moab area provide preferred habitats and escape terrain and the canyon bottoms and mesa tops adjacent to this escape terrain offer valuable foraging grounds. There is a large body of evidence that desert bighorn sheep need remote habitats and genetic connectivity to persist. Studies have indicated behavior, movements, recruitment and lamb survival can be negatively affected by humans (Duncan 1960, DeForge 1972, MacArthur et al. 1982, Miller and Smith 1985) and bighorn habitats negatively altered (Schoenecker 2002).

When bighorn sheep are exposed to people at predictable locations and times, they are often able to tolerate some level of disturbance (Hicks and Elder 1979, Goodson et al. 1999, Papouchis 2001). However, when bighorn sheep are approached closely, at random times or in irregular locations, even sheep that are habituated to humans may flee and vacate the area (Papouchis et al. 2001). Bighorn sheep may respond to human disturbance by a temporary or permanent abandonment of the area (Wilson et al. 1980, DeForge 1981, Legg 1998, Papouchis et al. 2001, Keller and Bender 2007). These movements may displace bighorn to less optimal habitats, thereby decreasing foraging efficiency (Horejsi 1976, Hicks and Elder 1979, Legg 1998, Bailey 1999), increasing energy expenditures (MacArthur et al. 1982, Legg 1998), and increasing their risk of predation (DeForge 1981, Papouchis 2001). Human disturbance may also increase stress levels in bighorns (Legg 1998) and lower the resistance of sheep to disease (Spraker 1977, Foreyt and Jessup 1982, Spraker et al. 1984, Schwantje 1986). Disturbance can also interfere with breeding activities (Legg 1998, Papouchis et al. 2001). The net impacts of human disturbance could result in a decrease in survival and reproduction of bighorns (Campbell and Remington 1981, Miller and Smith 1985, Cassirer et al. 1992, Caslick 1993, Papouchis et al. 2001, Keller and Bender 2007).

In summary, increased human activity near bighorn herds causes these animals to become wary and flee, interrupting their daily activities, such as foraging, watering and resting. This behavior

elevates stress levels, making them more susceptible to disease and predation. Ultimately, if disturbance levels become great enough, desert bighorn sheep will abandon an area. For the remaining herds to prosper, intensive management and conservation measures are necessary. The protection of undeveloped land is key to the species' survival.

From 2002 to 2010, the Moab Field Office, together with the Utah Division of Wildlife Resources (UDWR), Brigham Young University, the Wild Sheep Foundation, and Canyonlands National Park, implemented three 2-year GPS collar projects that tracked over 40 individual bighorn. These GPS collaring efforts have provided the Moab Field Office with valuable information that has facilitated mapping of critical habitats, migration corridors, and lambing grounds. These collars have also provided insights on the functioning importance of Mineral and Hell Roaring Canyons, as they provide corridors for genetic connectivity and dispersal of animals between the Canyonlands Herd and the Potash Herd. Data from these collars have also informed several unpublished master theses including the most recent research paper; *Desert bighorn sheep responses to human activity in south-eastern Utah and Alteration of Behavior by Desert Bighorn Sheep from Human Recreation* (Sproat et al 2019) and the recently published *Desert Bighorn Sheep Survival in Canyonlands National Park: 2002 – 2010* (Sproat et al 2012). In the winter of 2019, the UDWR collared 15 animals the same areas, fitting them with GPS collars that allow daily online tracking. Currently, Colorado State University is in the process of developing additional research work investigating recreational impact to these animals. Past radio collar projects that included the Potash Herd conducted in 1993 and 1994 resulted in the research paper *Responses of Desert Bighorn Sheep to Increased Human Recreation* (2001 Papouchis, Singer, Sloan).

Valuable information from the past collaring projects and the resultant research papers have allowed the Moab Field Office to develop and implement management measures to reduce the impacts of human activities in these specific crucial habitats. This information has also provided insight on how these animals expanded into other small bands throughout the area, how rams migrate to various ewe groups during the rut both in and outside of the Mineral and Hell Roaring Canyon areas, and the values of this population of desert bighorn in connecting the Canyonland herd with the Potash Herd (see Map 6 in Appendix C). Currently, expansion of extreme recreational uses may threaten the existence of this valuable native desert bighorn sheep herd.

Mineral and Hell Roaring Canyons offer local desert bighorn remote areas, fairly undisturbed by human activities, that provide ample foraging grounds surrounded by high quality escape terrain with four constructed and maintained water developments well-spaced throughout the area. These two canyons offer a unique situation, as the middle to upper reaches of these canyons have abundant thermal cover and escape terrain, foraging opportunity, springs that offer natural water source and no access from the canyon heads. Human activities at the mouths of the canyons and along the Green River seldom make their way up into the upper reaches of the canyons. However, any disturbance in or above the canyons becomes amplified due to the restrictive nature of the canyons.

From 2002 through 2012, UDWR surveys conducted in the fall of each year indicated that over 20% of the desert bighorn in the Potash Herd resided in Mineral and Hell Roaring canyons. In 2008, over 42% of the entire herd resided within these two canyons. From 2014 through 2017 there has been a slight decrease in the use of Mineral and Hell Roaring Canyons, with 14% to 18% of the animals residing in an area amounting to less than 8% of the crucial lambing and rutting habitat. This results in an area with concentrated, successful lambing, rearing of young and rutting

activities. During lambing and rearing of young bighorn, ewes are more sensitive to disturbances that interrupt their daily foraging, watering and resting activities or cause them to flee. During the rutting season, as rams move through the area to various ewe groups, new disturbances may alter their seasonal routes. In the Moab area, lambing occurs early April through late June and the rutting season begins in early September and continues through December. Ewes with lambs at their heels are extremely sensitive during the extreme summer heat in areas where water sources are limited.

Unlike many bighorn herds throughout the west that seasonally migrate from winter to summer ranges, the mild winters and remote dissected canyons in the Moab and Canyonlands area allow the desert bighorn to remain in the area year-round. In areas with minimal human disturbances, some small movements or dispersal may occur within the canyon areas as bighorn groups seek seasonal thermal cover, water and more protected lambing area, as rams move through different ewe groups during the rut, or as groups of ewes expand into unoccupied suitable habitats.

3.4.2 Environmental Impacts

3.4.2.1 Impacts of the Alternative A- Year Round Management

Alternative A would utilize proactive management strategies, as directed in the 2008 RMP (REC-3), to implement management methods to protect wildlife habitat while enhancing recreation opportunities. Alternative A would also support the BLM Mission by sustaining the health, diversity and productivity of a variety of wildlife, including the native Potash bighorn herd on 10,044 acres of prime and crucial habitats in Mineral and Hell Roaring canyons. Alternative A would further the enjoyment of wildlife among present and future generations of people.

Between 1979 and 2000, human recreation has increased over 300% in areas occupied by desert bighorn sheep in southeastern Utah (Spoart et al 2012). There has been extensive research on impacts of human activities on bighorn; many studies have found that human disturbance can alter habitat use and activity patterns of bighorn sheep (Van Dyke et al. 1983, Miller and Smith 1985, King and Workman 1986, Etchberger et al. 1989, Papouchis et al. 2000). Population declines (Van Dyke et al. 1983, Etchberger et al. 1989, Harris 1992), shifts in habitat use (Van Dyke et al. 1983), and interruption of seasonal migration routes (Ough and deVos 1984), has been linked to human disturbance.

Human activities, including recreation, near bighorn sheep result in increased group and individual vigilance and flight, as bighorn equate humans as potential predator risk. Vigilance refers to an animal's examination of its surroundings in order to heighten awareness of predator presence and is an important behavior during foraging, as animals must often venture away from the safety of escape terrain to find food and water. Vigilance often leads to increased flight response, depending on the individual or group assessment of a perceived risk. However, being vigilant comes at the loss of time spent feeding and resting, resulting a trade-off between the two behaviors. The length of time animals devote to vigilance is dependent on many factors including predation risk and hunger. The more vigilant an individual is, the more time they spend in scanning their environment and the less time they spend foraging and resting. The more often that vigilance leads to flight further increases energy expenditures and reduces foraging and resting time. For example, if a 110 pound ewe flees 300 meters upslope, she burns an additional 132 calories in a few minutes (1 kg of body mass to move 1 meter on an incline of 21.5% increases expenditures of energy by 37 J/kg (Dailey and Hobbs, 1989)).

Several recent studies focusing exclusively on Moab's Canyonlands and Potash herds have concluded that desert bighorn sheep spent less time grazing (32%) and more time scanning (21%) in high human use areas (22% grazing, 29% scanning) than in low human use areas (54% grazing, 8% scanning) (Spoart et al 2012). This result is consistent with those of Papouchis et al (2001) who observed stronger reactions of bighorn sheep to disturbance in high-use areas than to the same types of disturbance in low-use areas. Papouchis (2001) found the higher sensitivity of sheep to hikers was due to the greater unpredictability of the locations of hikers because, unlike road traffic, nearly all hiker disturbances of sheep were off-trail and variable locations. Similarly, roped assisted and aerial activities and delivery occur in many new and non-predictable locations, on, in and above talus slopes, steep rock walls and cliffs, thus penetrating habitats that bighorn rely on for perceived safety within their escape terrain.

There is conflicting evidence as to whether human activity disturbs bighorn sheep. In some studies sheep become acclimated to human activity (Hicks and Elder 1979, Hamilton et al. 1982) resulting in habituation. In other studies, behavior, movements, recruitment and lamb survival were negatively affected by humans (Duncan 1960, DeForge 1972, MacArthur et al. 1982, Miller and Smith 1985). Data from the Pusch Ridge Wilderness (PRW) in Arizona suggest that bighorn sheep habitat in PRW has been negatively altered by humans (Schoenecker 2002). Bighorn sheep coexist best with people when human activity in sheep habitat is predictable (Hamilton 1982). Although some bighorn may habituate to human presence (Papouchis et al. 2001), even bighorn that demonstrate no outward response to human presence may still be under physiological stress (MacArthur et al 1979, DeForge 1981), resulting in reduced potential for caloric consumption. As noted in Spoart 2012, animals in high use areas, where habituation occurs, spent more on vigilance and flight from perceived threat (expending more calories) and less time grazing (consuming fewer calories); habituation results in lower fitness due to low overall caloric intake than in animals not impacted by human activities.

Alternative A would create direct beneficial impacts to desert bighorn sheep and their crucial habitats in Mineral and Hell Roaring canyons, by ensuring bighorn sheep populations continue to graze more and scan less, resulting in maintaining population fitness, high levels of individual and group energetics and overall good health. Alternative A would also ensure bighorn can continue to access water developments that have been installed; securing uninterrupted daily use during lambing and the hot summer months that follow. Precluding roped and aerial activities, as well as temporary structures or facilities would maintain the quality of year-round, lambing and rutting habitat. No high-use climbing routes exist in Mineral and in Hell Roaring Canyon there are only six climbing routes that are minimally used. Precluding these roped and aerial activities, as well as temporary structures or facilities would eliminate current, low levels of human impact in Hell Roaring Canyon and allow the BLM to adequately manage an area that provides high quality year-round, lambing and rutting habitats that is important to both genetic connectivity and population dispersal for the entire Canyonlands and Potash populations. As other backcountry habitats for these species incur growing recreational pressure, the Mineral and Hell Roaring canyons would be able to maintain bighorn habitats that would secure the Canyonlands and Potash bighorn herds into the future.

Alternative A would create indirect beneficial impacts over time by insuring 10,044 acres of crucial bighorn year-round, lambing and rutting habitats are managed so that recreation growth would not negatively impact crucial habitat and would continue to provide genetic connectivity

and population dispersal to other bands of desert bighorn in both the Potash and Canyonlands areas as well as reliably protect lambing and rearing grounds.

3.4.2.2 Impacts of Alternative B – Year Round Management with the Issuance of Seasonal Climbing Permits for Selected Climbs

Alternative B would utilize seasonal proactive management strategies, as directed in the 2008 RMP (REC-3) and would also support the BLM Mission by sustaining the health, diversity and productivity of bighorn in Mineral and Hell Roaring canyons.

As discussed in Alternative A, recreational use is limited in the project area and it is reasonable to assume that without proactive management, recreational use would expand into Mineral and Hell Roaring canyons.

Implementing seasonal climbing restrictions that limit permit location, numbers and group size to six specific climbing locations (Witch, Warlock, Gollum, Cauldron, North and South Kachina Spires) would create positive direct impacts to bighorn by seasonally limiting climbing activities, thus limiting human disturbance to local bighorn. Alternative B would eliminate other known, additional or new roped and aerial delivery activities, therefore reducing additional or new impacts to bighorn in crucial habitats. Alternative B does not preclude climbing use at the aforementioned locations during the winter months when wintering bighorn may utilize this area.

Alternative B would reduce the potential for expansion of additional activities that could directly and indirectly impact bighorn habitats, as discussed in Alternative A.

Alternative B provides less overall proactive management strategies than does Alternative A and may result in direct and indirect impacts from the continuation of climbing use during the winter months in permitted areas.

Seasonal climbing activities in desert bighorn sheep habitats would lead to increased vigilance and flight response when permitted climbs occur. Seasonal permits would be allocated to ensure current climbing activity does not increase or expand and will not occur during the lambing, hot summer months and late winter. Papouchis (2001) found the higher sensitivity of sheep to off-trail hikers was due to the greater unpredictability of the locations of hikers because, unlike road traffic, nearly all hiker disturbances of sheep were off-trail and variable locations. Similarly, permitted climbing activities may result in sporadically increased vigilance and flight response.

Alternative B would seasonally create direct beneficial impacts to desert bighorn sheep and their crucial habitats in Mineral and Hell Roaring canyons, by ensuring bighorn sheep populations continue to graze more and scan less, during eight to ten months each year. Alternative B would also ensure that desert bighorn could continue to access water developments during the hot summer months. Seasonally precluding roped and aerial activities and delivery, as well as temporary structures or facilities, would ensure current, low levels of human impact in Mineral and Hell Roaring canyons to continue.

The impacts of Alternative B would be similarly to the direct and indirect impacts discussed in Alternative A during the seasonally restricted periods. Outside of the seasonally restricted period, the impacts would be similar but smaller in size, duration, and type than the No Action Alternative.

3.4.2.3 Impacts of the Alternative C – No Action Alternative

The No Action alternative would not facilitate needed proactive management strategies, as directed in the 2008 RMP (REC-3), for desert bighorn sheep habitat. The project area currently supports very minimal recreation use except for the Green River corridor. It is reasonable to assume that the No Action alternative would result in the expansion of roped and aerial activities into Mineral and Hell Roaring canyons. Expansion of these activities could result in extensive consequences to several important charismatic and native wildlife species, including desert bighorn sheep.

The No Action alternative would allow the continuation and expansion of roped and aerial activities into Mineral and Hell Roaring canyons, where current levels of human pressure are very minimal and where approximately 20% to 40% of the Potash herd resides. Currently desert bighorn sheep bands in this area are able to graze more and scan less, resulting in high levels of caloric consumption, individual and group energetics, population fitness and overall good health, due to the minimal human activity in the area. As roped and aerial activities expand into Mineral and Hell Roaring canyons behavior, movements, recruitment and lamb survival may be negatively affected or altered as discussed above and according to Duncan 1960, DeForge 1972, MacArthur et al. 1982, Miller and Smith 1985 and Schoenecker 2002. Research also show that although some bighorn may habituate to human presence (Papaouchis et al. 2001), even bighorn that demonstrate no outward response to human presence may still be under physiological stress (MacArthur et al 1979, Deforge 1981), resulting in reduced potential for caloric consumption.

As noted in the Spoart 2019 study, animals in high use areas in the Moab area, where habituation occurs, spent more on vigilance and flight from perceived threat (expending more calories) and less time grazing (consuming fewer calories); habituation results in lower fitness due to low overall caloric intake than in animals not impacted by human activities.

As discussed in the section above, human activities, including recreation, near bighorn result in increased group and individual vigilance and flight, as bighorn equate humans as a potential predator risk. The No Action alternative would result in vigilance and flight increases, decreases in time spent feeding and resting, resulting in increased energy expenditures and decreased caloric consumption. As human activities increase and expand onto the remote regions of these two canyons, resident bighorn will experience increasing pressure that would result in increased vigilance and flight.

This conclusion is supported by several recent studies that have focused exclusively on Moab's Canyonlands and Potash herds. Spoart (2012) found that Moab's desert bighorn sheep spent less time grazing and more time scanning in high human use areas (22% grazing, 29% scanning) than in low human use areas (54% grazing, 8% scanning) (Spoart 2012). Results of Spoart (2019) are consistent with those of Papouchis et al. (2001), who observed stronger reactions of bighorn sheep to disturbance in high-use areas than to the same types of disturbance in low-use areas. In Spoart (2019), the results on the local bighorn sheep herd indicated differences in activity budgets of bighorn sheep occupying areas of high- and low-human activity, with animals in high-use areas expending more time being vigilant and less time grazing than those in low-use areas.

Papouchis (2001) found the higher sensitivity of desert bighorn sheep to hikers was due to the greater unpredictability of the locations of hikers because, unlike road traffic, nearly all hiker disturbances of sheep were off-trail and in variable locations. In MacArthur et al. 1982 bighorn sheep responses were most severe when exposed to hikers travelling cross-country, but animals also react in ways that are not readily apparent and detection of subtle differences in activity

patterns requires specific investigatory methods. In Spoart (2019) the results pointed to differences in activity budgets of Moab's bighorn sheep occupying areas of high- and low-human activity, with animals in high-use areas expending more time being vigilant and less time grazing than those in low-use areas.

Given that the Moab desert bighorn responded to an increase in the level of human activity by spending more time being vigilant and less time foraging, Spoart (2019) indicated that a ban on off-trail hiking activity in core bighorn habitat as recommended by Papouchis et al. (2001) seems warranted. The unpredictability associated with off-trail hikers, a lack of consistency in hiker behavior, and the potential for such activity to be perceived as less than benign by bighorn sheep encountered by hikers may account for such responses in bighorn sheep. While off-trail hiking in the project area is not common, unpredictable activity associated with roped and aerial activities and delivery is increasing in this area.

Extensive research throughout numerous areas in the western United States, as discussed in the section above, has documented that human disturbance can alter habitat use and activity patterns of bighorn sheep (Van Dyke et al. 1983, Miller and Smith 1985, King and Workman 1986, Etchberger et al. 1989, Papouchis et al. 2000). Population declines (Van Dyke et al. 1983, Etchberger et al. 1989, Harris 1992), shifts in habitat use (Van Dyke et al. 1983), and interruption of seasonal migration routes (Ough and deVos 1984), has been linked to human disturbance. Chronic disturbance by humans can also affect habitat use; responses can vary from temporary avoidance to abandonment of habitat (Creel and Christianson 2008) and ultimately, disruption of metapopulation dynamics (Epps et al. 2005). Increases in human activity would reduce grazing time and increase vigilance and flight response, as bighorn react and move away from new and increasing human pressure. This in turn would result in decreases in individual caloric intake and reduced population fitness. Energetic cost of a standing bighorn is 26% greater than that for one lying down. For every one kg of body mass to move one meter on a slope of 21.5%, increases expenditures of energy by 37 J/kg (Dailey and Hobbs 1989). That is, if a 110 pound ewe flees 300 meters upslope she burns an additional 132 calories in a few minutes. If an animal flees multiple times a day rather than rests, caloric demands increase while foraging and resting opportunities decrease. Long-term, intense disturbance stimuli, such as increase vigilance and flight response, may cause habitat shifts that are often not detected until after habitat is lost (Longshore et al. 2013).

Water scarcity, often combined with heat stress, is a common challenge for many wildlife species in arid climates. Bighorn sheep typically range within two miles of free water (Geist 1971, Van Dyke et al. 1983) and are highly dependent upon reliable water sources especially during the hot season. Constant or frequent human use at or near water sources, particularly during the summer months, may adversely affect sheep and may cause them to abandon the water source in favor of less disturbed areas (Blong 1967, DeForge 1972, Cunningham 1982, Miller and Smith 1985). As aerial and roped activities increase in Mineral and Hell Roaring canyons, it is expected that consistent use of four developed water systems within the project area by desert bighorn may be negatively impacted, especially by lactating ewes with lambs during the hot, dry summer months.

As indicated in Spoart (2012), there may be a biological threshold that has not yet been crossed, allowing for desert bighorn to sustain themselves as a population in areas of increased human activity. As other backcountry habitats for these species incur growing recreational pressure, the No Action alternative would not adequately manage an area that not only provides high quality year-round, lambing and rutting habitats but a large concentration of animals that supports needed genetic connectivity and population dispersal for the entire Canyonlands and Potash populations.

The No Action Alternative would not support BLM policy for sensitive species or ESA recommendations.

The No Action alternative would create indirect impacts over time, as indicated above, by allowing roped and aerial activities to expand into 10,044 acres of crucial desert bighorn year-round, lambing and rutting habitats. The expansion of these activities would negatively impact crucial habitat and future genetic connectivity and population dispersal to other bands of desert bighorn in both the Potash and Canyonlands areas. The No Action alternative would not secure crucial protection of lambing and rearing grounds for a unique desert bighorn sheep herd.

3.2.1.3. *Cumulative Impacts*

Cumulative Impact Area (CIA) for Recreation and Wildlife (Same for all Alternatives)

The cumulative impact area (CIA) for Recreation and Wildlife is identified in Section 3.1.2.4 and the map is Appendix C (Map 4)

Past and Present Actions (Same for All Alternatives)

Past and present activities in the CIA for area is identified in Section 3.1.2.4.

Reasonably Foreseeable Action Scenario (Same for All Alternatives)

Section 3.1.2.4 identifies reasonably foreseeable future actions that would cumulatively affect the same resources in the CIA as the two action and the No Action alternatives.

Desert Bighorn Sheep

As noted above, aerial and roped activities are expected to increase as those engaged in these activities seek less crowded and novel alternatives. The entire CIA supports crucial bighorn lambing and rutting habitats. Within the CIA, Alternative A would limit the expansion of roped and aerial activities on about 10,000 acres, where there is a high consideration of year-round use by bighorn. This project area also provides invaluable genetic connectivity between the two groups of desert bighorn (Canyonland and Potash herds). Under Alternative A, vigilance and flight responses would be expected to be reduced; rates, energy budgets and caloric consumption would improve population fitness within the project area, resulting in continued genetic connectivity and population dispersal throughout the CIA.

Alternative A would ensure that Mineral and Hell Roaring Canyons continue as a functional source population (high quality areas where birth rates are greater than death rates, causing the population to grow, and resulting in emigration to other areas), and allow for emigration into the CIA and throughout bighorn habitats in the Moab Field Office. This emigration would support sink population areas where human activities may or have reduced habitat quality and small herds are facing local extirpation.

Within the CIA, Alternative B would seasonally allow climbing use at six specific areas and limit the expansion of roped and aerial activities outside of these climbing areas on about 10,000 acres. As discussed above, this area supports bighorn habitats, facilitates invaluable genetic connectivity between subpopulations, and supports a large concentration of successfully productive desert bighorn. Under Alternative B, outside of the seasonal permitted uses, vigilance and flight responses would be expected to continue at current rates, energy budgets and caloric consumption would maintain population fitness resulting in continued genetic connectivity and population dispersal throughout the CIA.

The No Action alternative would allow for roped and aerial activities and delivery to continue and expand into the remote areas of these two canyons. Extensive research, discussed previously, indicates that human activities increase vigilance and flight. As these activities expand into the remote areas of these two canyons, vigilance and flight response is expected to increase energy expenditures and reduce potential for caloric consumption, potentially reducing population fitness resulting in a loss of genetic connectivity and population dispersal throughout the CIA.

The No Action alternative would not ensure Mineral and Hell Roaring Canyons would continue as a source population. Without emigration from this area, sink populations where human activities may or have reduced habitat quality and small herds may face local extirpation.

CHAPTER 4. PUBLIC INVOLVEMENT, CONSULTATION AND COORDINATION

4.1. Public Involvement

During preparation of this EA, the public was notified of the project by posting on the BLM's ePlanning website on April 7, 2020. A formal Scoping Period on the project was announced in a Press Release issued on May 29, 2020. The project was featured in a full page newspaper story in the *Salt Lake Tribune* on June 18, 2020. As a result, the BLM received 222 scoping comments. These comments are summarized in Appendix B.

A 30-day formal comment period on the EA was offered from August 18 to September, 21, 2020. The availability of the comment period was announced in a Press Release issued on August 19, 2020. As a result of offering a comment period, the BLM received 13 comments on the EA. The comments received, as well as the BLM's responses to these comments, are summarized in Appendix D.

In addition, the proposal was discussed at the regular meetings of Grand County Trail Mix, the county's non-motorized recreation committee. These meetings are public meetings and are included in the Grand County meeting agenda center. Trail Mix includes a representative of the climbing community, who was further informed of the proposed action via follow up phone calls.

3.5 Consultation and Coordination

The BLM informally consulted with the U.S. Fish and Wildlife Service as well as the Utah Division of Wildlife Resources. These agencies provided input on the development of the EA. The U.S. Fish and Wildlife Service provided concurrence with the BLM's determination of beneficial effects on October 20, 2020. The Service concurred with the BLM's finding that the proposed action would "not likely to adversely affect" the Mexican Spotted Owl.

4.2. List of Preparers

4.2.1. BLM Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Katrina Diemer	NRS	Soil, Air Quality, Wastes,
Gabe Bissonette	Ecologist	Wetlands, Riparian, Floodplains,

Bill Stevens	Outdoor Recreation Planner	Socioeconomics, BLM Natural Areas, Wilderness/WSA, Lands with Wilderness Characteristics, Environmental Justice, Wild and Scenic Rivers
Pamela Riddle	Wildlife Biologist	T&E Animals, Wildlife, Migratory Birds, Utah BLM Sensitive Species, T & E Plants
Lori Hunsaker	Archeologist	Cultural, Native American
Katie Stevens	Outdoor Recreation Planner	Team Lead, Recreation, VRM, ACECs
Logan Lefevre	Rangeland Management Specialist	Invasive Species, Livestock Grazing, RHS, Vegetation, Woodlands
Josh Relph	Fuels	Fuels
David Pals	Geologist	Geology, Water Resources, Paleontology
Lisa Wilkolak	Realty Specialist	Lands

REFERENCES

- Apfelbaum, S.I. and P. Seelbach. 1983. Nest tree, habitat selection and productivity of seven North American raptor species based on the Cornell University nest record card program. Raptor Research 17(4):97-113.
- Bailey, J. 1999. Open discussion-what are 10 things that we do know about wild sheep habitat and effects of disturbance on wild sheep? Proceedings of the Biennial Symposium of the Northern Wild Sheep and Goat Council 12:139-149.
- Beecham, J. J. and M. N. Kochert. 1975. Breeding biology of the Golden Eagle in southwestern Idaho. Wilson Bulletin 87:506–513.
- Blong, B. and W. Pollard. 1968. Summer water requirements of desert bighorn in the Santa Rosa Mtns., Calif., in 1965. California Fish and Game 54 : 289-296.
- Boeker, E.L. & Ray, T.D. (1971). Golden eagle population studies in the Southwest. Condor 73, 463–467.
- Brambilla, M., D. Rubolini, and F. Guidali. 2004. Rock climbing and raven (*Corvus corax*) occurrence depress breeding success of cliff-nesting peregrines (*Falco peregrinus*). Ardeola 51:425–430.
- Brown, B.T. and L.E. Stevens. 1997. Winter bald eagle distribution is inversely correlated with human activity along the Colorado River, Arizona. Journal of Raptor Research 31(1):7-10.
- Buick, A. M. and D. C. Paton. 1989. Impact of off-road vehicles on the nesting success of Hooded Plovers *Charadrius rubricollis* in the Coorong region of South Australia. Emu 89:159–172.
- Campbell, B., and R. Remington. 1981. Influence of construction activities on water-use patterns of desert bighorn sheep. Wildlife Society Bulletin 9:63-65.
- Caslick, J. W. 1993. Bighorn sheep in Yellowstone: a literature review and some suggestions for management. 1993. Yellowstone National Park, WY, USA.
- Cassirer, E. F., D. J. Freddy, and E. D. Ables. 1992. Elk responses to disturbance by cross-country skiers in Yellowstone National Park. Wildlife Society Bulletin 20:375-381.
- Creel, S., J. Winnie, Jr., B. Maxwell, K. Hamlin, and M. Creel. 2005. Elk alter habitat selection as an antipredator response to wolves. Ecology 86: 3387– 3397.
- Cunningham and J.C. deVos. 1992. Mortality of mountain sheep in the Black Canyon area of northwest Arizona. Desert Bighorn Council Transactions 36 : 27-29.
- Dailey, T.V. and Hobbs, N.T., 1989. Travel in alpine terrain: energy expenditures for locomotion by mountain goats and bighorn sheep. Canadian Journal of Zoology, 67:2368-2375

- Deforge, J. R. 1972. Man's invasion into bighorn's habitat. Desert Bighorn Council Transactions 16: 112-116.
- Driscoll, D. E., R. E. Jackman, W. G. Hunt, G. L. Beatty, J. T. Driscoll, R. L. Glinski, T. A. Gatz, and R. I. Mesta. 1999. Status of nesting Bald Eagles in Arizona. Journal of Raptor Research 33:218–226. Duncan, O. E. 1960. Human encroachment on bighorn habitat. Desert Bighorn Council Transactions 4:35-37.
- Epps, W. C., P. J. Palsbol, J. D. Wehausen, G. K. Roderick, R. R. Ramey, II, and D. R. McCullough. 2005. Highways block gene flow and cause a rapid decline in genetic diversity of desert bighorn sheep. Ecology Letters 8: 1029– 1038.
- Etchberger, R. C., P. R. Krausman, and R. Mazaika. 1989. Mountain sheep habitat characteristics in the Pusch Ridge Wilderness, Arizona. Journal of Wildlife Management 53:902-907.
- Ferna' Ndez, C. and P. Azkona. 1993. Human disturbance affects parental care of marsh harriers and nutritional status of nestlings. Journal of Wildlife Management 57:602–608.
- Ferna' Ndez-Juricic, E. and J. L. Telleri' A. 2000. Effects of human disturbance on spatial and temporal feeding patterns of blackbird *Turdus merula* in urban parks in Madrid, Spain. Bird Study 47:13–21.
- Foreyt, W. J., and D. A. Jessup. 1982. Fatal pneumonia of bighorn sheep following association with domestic sheep. Journal of Wildlife Diseases 18:163-168.
- Frid, A. & Dill, L.M. 2002. Human-caused disturbance stimuli as a form of predation risk. Conserv. Ecol. 6, 11.
- Geist, V. 1971. Mountain sheep: a study in behavior and evolution. The University of Chicago Press. Chicago and London. 383 pp.
- Gill, J. A. and W. J. Sutherland. 2000. Predicting the consequences of human disturbance from behavioral decisions. Pages 51–64 in Behaviour and conservation. Gosling, L. M. and W. J. Sutherland (Editors). Cambridge University Press, Cambridge, United Kingdom.
- González, L. M., Arroyo, B. E., Margalida, A., Sanchez, R., & Oria, J. 2006. Effect of human activities on the behaviour of breeding Spanish imperial eagles (*Aquila adalberti*): Management implications for the conservation of a threatened species. Animal Conservation., 9, 85–93.
- Goodson, N. J., D. R. Stevens, K. McCoy, and J. Cole. 1999. Effects of river based recreation and livestock grazing on desert bighorn sheep on the Navajo nation. Proceedings of the Biennial Symposium of the Northern Wild Sheep and Goat Council 12:123-132.
- Grubb, T. G. and R. M. King. 1991. Assessing human disturbance of breeding Bald Eagles with classification tree models. Journal of Wildlife Management 55:500–511.
- Hamilton, K., S. A. Holl, C. L. Douglas. 1982. An evaluation of the effects of recreational activity on bighorn sheep in the San Gabriel Mountains, California. Desert Bighorn Council Transactions 26: 50-55.

- Hansen, D.L., R.J. Spaul, B. Woodbridge, D. Leal, J.R. Dunk, J.W. Watson, and J. T. Driscoll. 2017. Human disturbance of breeding golden eagles (*Aquila chrysaetos*). Unpublished report prepared for the Western Golden Eagle Team, U.S. Fish and Wildlife Service. Available online at: <https://ecos.fws.gov/ServCat/Reference/Profile/112570>
- Harris, L. K. 1992. Recreation in mountain sheep habitat. Unpublished Ph.D. dissertation, The University of Arizona, Tucson. 156 pp.
- Hayward, L. S., A. E. Bowles, J. C. Ha, and S. K. Wasser. 2011. Impacts of acute and long-term vehicle exposure on physiology and reproductive success of the Northern Spotted Owl. *Ecosphere* 2:65.
- Hicks, L. L. and J. M. Elder. 1976. Human disturbance of Sierra Nevada bighorn sheep. *Journal of Wildlife Management* 43: 909-915.
- Hoffman, S.W. & Smith, J.P. 2003. Population trends of migratory raptors in western North America, 1977–2001. *Condor* 105, 397–419.
- Holmest, . L., R. L. Knightl, . Stegalla, and G. R. Craig. 1993. Responses of wintering grassland raptors to human disturbance. *Wildlife Society Bulletin* 21:461-468.
- Ganey, J. L., R. P. Balda, and R. M. King. 1993. Metabolic rate and evaporative water loss of Mexican spotted and great horned owls. *Wilson Bulletin* 105:645-656.
- Horejsi, B. 1976. Some thoughts and observations on harassment of bighorn sheep. *Proceedings of the Biennial Symposium of the Northern Wild Sheep and Goat Council* 4:149-155.
- Keller, B. J., and L. C. Bender. 2007. Bighorn sheep response to road-related disturbances in Rocky Mountain National Park, Colorado. *Journal of Wildlife Management* 71:2329-2337.
- King, M. M. 1984. Behavioral response of desert bighorn sheep to human harassment; a comparison of disturbed and undisturbed populations. Ph.D. thesis, Utah State University, Logan. 137 pp.
- Kirmse, W. 1994. Raptor's plasticity of nest site selection. Pages 143-145 in B.U. Meyberg and R.D. Chancellor, eds. *Raptor conservation today: world working group for birds of prey and owls*. London
- Kochert, M.N., Steenhof, K., McIntyre, C.L., Craig, E.H., 2002. Golden Eagle (*Aquila chrysaetos*). In: *The Birds of North America Online*. <http://dx.doi.org/10.2173/bna.684>.
- Kochert, M.N., Steenhof, K., McIntyre, C.L. & Craig, E.H. 2002. Golden eagle: *Aquila chrysaetos*. In *The Birds of North America*. Poole, A. & Gill, F. (Eds). Washington, DC: The Academy of Natural Sciences and the American Ornithologists' Union
- Legg, K. L. 1998. A review of the potential effects of winter recreation on bighorn sheep. *Proceedings of the Biennial Symposium of the Northern Wild Sheep and Goat Council* 11:14-19.

- Livezey, K. B., E. Ferna' Ndez-Juricic, and D. T. Blumstein. 2016. Database of bird flight initiation distances to assist in estimating effects from human disturbance and delineating buffer areas. *Journal of Fish and Wildlife Management* 7:181–191.
- Longshore, K, C. Lowery, D.B. Thompson. 2013. Detecting short-term responses to weekend recreation activity: Desert bighorn sheep avoidance of hiking trails.
- Macarthur, R. A., R. H. Johnson, and V. Geist. 1979. Factors influencing heart rate in free ranging bighorn sheep: A physiological approach to the study of wildlife harassment. *Canadian Journal of Zoology* 57:2010-2021.
- MacArthur, R. A. , V. Geist, and R. H. Johnston. 1982. Cardiac and behavioral responses of mountain sheep to human disturbance. *Journal of Wildlife Management* 46:351-358.
- Mason, J. T., C. J. W. McClure, and J. R. Barber. 2016. Anthropogenic noise impairs owl hunting behavior. *Biological Conservation* 199:29–32.
- MacLaren, P. 1986. Resource partitioning in an assemblage of breeding raptors from southeastern Wyoming. MS Thesis. Univ. Wyoming, Laramie. 64pp.
- Mathisen, J.E. 1968. Effects of human disturbance on nesting bald eagles. *Journal of Wildlife Management*. 32:1-6.
- Mountain Project. 2020. Adventure Projects Inc. and REI. <https://www.mountainproject.com>. Accessed July 29, 2020
- Miller, G, and E. L. Smith. 1985. Human activity in bighorn sheep habitat: What disturbs sheep? *Desert Bighorn Council Transactions* 29:4-7.
- Millsap, B.A., Zimmerman, G.S., Sauer, J.R., Nielson, R.M., Otto, M., Bjerre, E. & Murphy, R. (2013). Golden eagle population trends in the western United States: 1968–2010. *J. Wildl. Mgmt.* 77, 1436–1448.
- Murphy, J.R., F.J. Camenzind, D.G. Smith, and J.B. Weston. 1969. Nesting ecology of raptorial birds in central Utah. *Brigham Young Univ. Sci. Bull. Biol. Serv.* 10(4):1-36.
- Ough, W. D. and J. C. deVos. 1984. Intermountain travel corridors and their management implications for bighorn sheep. *Desert Bighorn Council Transactions* 28: 32-36.
- Palacios, E. And E. Mellink. 1996. Status of the Least Tern in the Gulf of California. *Journal of Field Ornithology* 67:48–58.
- Papouchis, C M., Francis J. Singer and William B. Sloan. 2001. Responses of Desert Bighorn Sheep to Increased Human Recreation. *The Journal of Wildlife Management*, Vol. 65, No. 3 (Jul. 2001), pp. 573-582.
- Papouchis, C. M., F. J. Singer, and W. Sloan. 2000. Effects of increasing recreational activity on desert bighorn sheep in Canyonlands National Park, Utah. Pages 364 - 391 in Singer, F. J. and M. A. Gudorf. Restoration of bighorn sheep metapopulations in and near 15 national

- parks: conservation of a severely fragmented species. USGS Open File Report 99-102, Midcontinent Ecological Science Center, Fort Collins, CO.
- Pauli, B. P., R. J. Spaul, and J. A. Heath. 2017. Forecasting disturbance effects on wildlife: tolerance does not mitigate effects of increased recreation on wildlands. *Animal Conservation* 20:251–260. doi:10.1111/acv. 12308
- Rinkevich, S. E., and R. J. Gutiérrez. 1996. Mexican spotted owl habitat characteristics in Zion National Park. *Journal of Raptor Research* 30:74-78.
- Romin, Laura A and James A. Muck. 2002. Utah Field Office guidelines for raptor protection from human and land use disturbances. U.S. Fish and Wildlife Service, Utah Field Office Salt Lake City
- Schwantje, H. M. 1986. A comparative study of bighorn sheep herds in southeastern British Columbia. *Proceedings of the Biennial symposium of the Northern Wild Sheep and Goat Council* 5:231-252.
- Schoeneckeri, K and P. Krausman. 2002. Human disturbance in bighorn sheep habitat, Pusch Ridge Wilderness, Arizona School of Renewable Natural Resources, The University of Arizona, Tucson AZ 85721; Current address: U.S. Geological Survey, Biological Research Division, 4512 McMurry Ave, Fort Collins CO 80525
- Servheen, C.W. 1975. Ecology of the wintering bald eagles on the Skagit River, Washington. M.S. Thesis. University of Washington, Seattle. 96pp.
- Shea, D.S. 1973. A management-oriented study of bald eagle concentrations in Glacier National Park. M.S. Thesis. University of Montana, Missoula. 78pp.
- Spaul., R.J., Julie A. Heath. 2016. Nonmotorized recreation and motorized recreation in shrub-steppe habitats affects behavior and reproduction of golden eagles (*Aquila chrysaetos*). *Raptor Research Center, Boise State University, Boise, ID, USA. Ecology and Evolution* 2016; 6: 8037–8049
- Spaul., R.J., Julie A. Heath. 2017. Flushing Responses of Golden Eagles (*Aquila chrysaetos*) In Response To Recreation. *The Wilson Journal of Ornithology*, 129(4):834-845.
- Spraker, T. R. 1977. Fibrinous pneumonia of bighorn sheep. *Desert Bighorn Council Transactions* 24:17- 18.
- Spraker, T. R., C. P. Hibler, G. G. Schoonveld, and W. S. Adney. 1984. Pathologic changes and microorganisms found in bighorn sheep during a stress-related die-off. *Journal of Wildlife Diseases* 20:319-327.
- Sproat, Kanalu K., N. R. Martine, T. S. Smith, W. B. Sloan, J. T. Flinders, J. W. Bates, J. G. Cresto and V. C. Bleich. 2019. Alteration of behavior by desert bighorn sheep from human recreation. *Wildlife Research*, 47(1): 16-24.
- Sproat, Kanalu K. 2012. Desert Bighorn Sheep Survival in Canyonlands National Park: 2002 - 2010. *All Theses and Dissertations*. 3916.

- Stalmaster, M.V. 1976. Winter ecology and effects of human activity on bald eagles in the Nooksak River valley, Washington. M.S. Thesis. Western Washington University, Bellingham. 100pp.
- Stalmaster, M.V. 1983. An energetics simulation model for managing wintering bald eagles. *Journal of Wildlife Management*. 47:349-359.
- Stalmaster, M.V. and J.R. Newman. 1978. Behavioral responses of wintering bald eagles to human activity. *Journal of Wildlife Management*. 42(3):506-513.
- Steidl, R. J. and R. G. Anthony. 1996. Responses of Bald Eagles to human activity during the summer in interior Alaska. *Ecological Applications* 6:482-491.
- Steidl, R. J., Kozie, K. D., Dodge, G. J., Pehovski, T., & Hogan, E. R. 1993. Effects of human activity on breeding behavior of golden eagles in Wrangell-St. Elias National Park and Preserve, a preliminary assessment. National Park Service, Wrangell-St. Elias National Park and Preserve, Copper Center, Alaska, WRST Research and Resource Report; no.93-3.
- Stien, J. and R. A. Ims. 2016. Absence from the nest due to human disturbance induces higher nest predation risk than natural recesses in Common Eiders *Somateria mollissima*. *Ibis* 158:249-260.
- Strasser, E.H. & Heath, J.A. 2013. Reproductive failure of a human-tolerant species, the American kestrel, is associated with stress and human disturbance. *J. Appl. Ecol.* 50, 912-919.
- Steenhof, K., Brown, J.L. & Kochert, M.N. 2014. Temporal and spatial changes in golden eagle reproduction in relation to increased off highway vehicle activity. *Wildl. Soc. Bull.* 38, 682-688.
- Steidl, R. J. and R. G. Anthony. 2000. Experimental effects of human activity on breeding Bald Eagles. *Ecological Applications* 10:258-268.
- Swarthout, Elliott Clifford Hunt. 1999. Effects of backcountry recreation on Mexican spotted owls. The University of Arizona. <http://hdl.handle.net/10150/278707>
- Swarthout, Elliott .H and R. J Steidl. 2000. Flush responses of Mexican spotted owls to recreationists. *Journal of Wildlife Management* 65(2):312-317
- Tarjuelo, R., I. Barja, M. B. Morales, J. Traba, A. Beni'Tez-Lo'Pez, F. Casas, B. Arroyo, M. P. Delgado, and F. Mougeot. 2015. Effects of human activity on physiological and behavioral responses of an endangered steppe bird. *Behavioral Ecology* 26:828-838.
- U.S. Fish and Wildlife Service. 1995. Recovery plan for the Mexican spotted owl: Volume I. Albuquerque, New Mexico, USA.
- U.S. Fish and Wildlife Service. 2012. Final Recovery Plan for the Mexican Spotted Owl (*Strix occidentalis lucida*), First Revision. U.S. Fish and Wildlife Service. Albuquerque, New Mexico, USA. 413 pp.

U.S. Fish and Wildlife Service. 2020. Disallowing Roped and Aerial Activities in Mineral and Hell Roaring Canyons Scoping. U.S. Fish and Wildlife Service, Utah Field Office Salt Lake City.

Van Den Akker, J. B. 1960. Human encroachment on bighorn habitat. Desert Bighorn Council Transactions 4:38-40.

Van Dyke, W. A., A. Sands, J. Yoakum, A. Polenz, and J. Blaisdell. 1983. Wildlife habitats in managed rangelands - the Great Basin of southeastern Oregon: bighorn sheep. USDA Forest Service and USDI Bureau of Land Management General Technical Report PNW-159. 37pp

Watson, H., M. Bolton, and P. Monaghan. 2014. Out of sight but not out of harm's way: human disturbance reduces reproductive success of a cavity-nesting seabird. Biological Conservation 174:127–133.

Webber, A. F., J. A. Heath, and R. A. Fischer. 2013. Human disturbance and stage-specific habitat requirements influence Snowy Plover site occupancy during the breeding season. Ecology and Evolution 3:853– 863.

Wiedmann, B. P. and V. C. Bleich. 2014. Demographic responses of bighorn sheep to recreational activities: a trial of a trail. Wildlife Society Bulletin 38:773–782.

Whitfield, D.P., Fielding, A.H., McLeod, D.R.A. & Haworth, P.F. 2004. Modelling the effects of persecution on the population dynamics of golden eagles in Scotland. Biol. Conserv. 119, 319–333

APPENDICES

Appendix A: Interdisciplinary Team Analysis Record Checklist

Appendix B: Scoping Comments and BLM Responses

Appendix C: Maps:

Map 1: Proposed Restriction Area in Mineral and Hell Roaring Canyons

Map 2: Named Climbs within the Project Area

Map 3: Detailed Map of Proposed Exclusion Area at the Fruit Bowl

Map 4: Cumulative Impact Area

Map 5: Nesting areas of Raptors, including the Mexican Spotted Owl within the Proposed Restriction Area

Map 6: Crucial Lambing and Rutting Habitat for Desert Bighorn Sheep

Appendix D: Comments Submitted on the EA and BLM Responses

Appendix E: Outline of Proposed Permit System for Six Climbs in Hell Roaring Canyon

Appendix A: Interdisciplinary Team Analysis Record Checklist**Project Title:** Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons**NEPA Log Number:** DOI BLM-UT-Y010-2020-0068-EA**Project Leaders:** Pam Riddle/Katie Stevens**DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)**

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

The following elements are not present in the Moab Field Office and have been removed from the checklist:
Farmlands (Prime or Unique), Wild Horses and Burros.

Determi- nation	Resource	Rationale for Determination*	Specialist	Date	Initials
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)					
NI	Air Quality Greenhouse Gas Emissions	The activity would not affect Air Quality.	Katherina Diemer	4/15/20	KD
NI	Floodplains	There are floodplains within the project area. The action alternatives would not negatively impact floodplain morphology, function, or connectivity.	Gabe Bissonette	4/15/20	GJB
NI	Soils	There are some soils in the project area, though much of the area is hard rock. The action alternatives would not negatively impact soils.	Katherina Diemer	4/15/20	KD
NI	Water Resources/Quality (drinking/surface/ground)	Disallowing aerial and roped activities would have no impact on water resources.	Dave Pals	4/14/2020	DP
NI	Wetlands/Riparian Zones	There are riparian areas within the project area. The action alternatives would not negatively impact these habitats.	Gabe Bissonette	4/15/20	GJB
NP	Areas of Critical Environmental Concern	There are no ACECs within the project area. See 2008 Moab Resource Management Plan.	Katie Stevens	4/7/20	KS
PI	Recreation	The proposal would negatively impact certain types of recreation activity in the project area; these impacts are analyzed in full in the EA.	Katie Stevens	4/7/20	KS
NI	Wild and Scenic Rivers	The adjacent Green River is a designated Wild and Scenic River. The proposed restrictions would not impact the Outstandingly Remarkable Values for which it was designated.	Bill Stevens	4/7/20	BS
NI	Visual Resources	The project area is largely managed as VRM Class II. The activities proposed for restriction are temporary. While limiting roped and aerial activity could benefit visuals, there would also be fewer people present to enjoy the visual resources of the area.	Katie Stevens	4/7/20	KS
NP	BLM Natural Areas	See 2008 Moab Resource Management Plan.	Bill Stevens	4/7/20	BS

Determination	Resource	Rationale for Determination*	Specialist	Date	Initials
NI	Socio-economics	Minimal impact on local area economy. Although almost every visitor to Grand County makes some contribution to the local economy, the marginal impact of any one visitor or even a large group of visitors is small compared to the overall County economy. BLM does not have exact visitation numbers to the project area, making it impossible to quantify this minor impact.	Bill Stevens	4/14/20	BS
NP	Wilderness/WSA	See 2008 Moab Resource Management Plan.	Bill Stevens	4/7/20	BS
NI	Lands With Wilderness Characteristics	Portions of the proposed restriction area are in lands identified by BLM as possessing wilderness characteristics. The proposed restrictions could enhance the wilderness characteristics of solitude and primitive recreation and help maintain naturalness.	Bill Stevens	4/14/20	BS
NI	Cultural Resources	The proposed closures would not negatively impact cultural resources.	Lori Hunsaker	4/13/20	LAH
NI	Native American Religious Concerns	The proposed closures would limit or restrict access to areas of cultural or traditional significance.	Lori Hunsaker	4/13/20	LAH
NI	Environmental Justice	There are no identified EJ populations in the planning area who would be disproportionately adversely impacted by the action alternatives.	Bill Stevens	4/14/20	BS
NI	Wastes (hazardous or solid)	There are no wastes in or associated with the action alternatives	Katherina Diemer	4/15/20	KD
PI	Threatened, Endangered or Candidate Animal Species	Suitable habitats and known occupancy for Mexican spotted owls in project area with potential for relevant positive impacts that will be analyzed in detail in the EA	Pamela Riddle	4/7/20	PR
PI	Migratory Birds	Suitable habitats and known occupancy for several raptor species in project area with potential for relevant positive impacts that will be analyzed in detail in the EA	Pamela Riddle	4/7/20	PR
NI	Utah BLM Sensitive Species	Suitable habitats and known occupancy for several BLM sensitive species in project area. The action alternatives would not negatively impact habitat or occupancy potential; therefore, sensitive species would not be affected to a degree that detailed analysis is required	Pamela Riddle	4/22/20	PR
PI	Fish and Wildlife Excluding USFW Designated Species	Crucial desert bighorn sheep lambing, rutting, migration and year-round habitats in project area with potential for relevant positive impacts that will be analyzed in detail in the EA	Pamela Riddle	4/7/20	PR
NI	Threatened, Endangered or Candidate Plant Species	Suitable geology associated with seeps/spring habitats is found in the project area; Navajo sedge occurrences not known in the area. The action alternatives would not negatively limit habitat potential; Navajo sedge potential would not be affected to a degree that detailed analysis is required	Pam Riddle	4/7/20	PR

Determination	Resource	Rationale for Determination*	Specialist	Date	Initials
NI	Livestock Grazing	Actions would not diminish current livestock grazing resources	Aaron Vollmer	4/28/20	AV
NI	Rangeland Health Standards	Would not impact rangeland health standards	Aaron Vollmer	4/28/20	AV
NI	Invasive Species/Noxious Weeds	No impact on the spread of noxious weeds and invasive species.	Logan Lefevre	5/4/20	LL
NI	Vegetation Excluding USFW Designated Species	The action alternatives would limit recreational activity; thus, the impact to adjacent plant groups is minimal to no impact.	Aaron Vollmer	4/28/20	AV
NI	Woodland / Forestry	No trees would be harmed by the action alternatives.	Aaron Vollmer	4/28/20	AV
NI	Fuels/Fire Management	The action alternatives would not impact fire/fuels to the degree that would require a detailed analysis.	Josh Relph	4/29/20	JR
NI	Geology / Mineral Resources/Energy Production	The area is managed as NSO under the Moab RMP.	Dave Pals	4/14/2020	DP
NI	Lands/Access	Subject to valid, existing rights.	Lisa Wilkolak	4/9/2020	LW
NI	Paleontology	Not surface disturbing	Dave Pals	4/14/2020	DP

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator			
Authorized Officer			

Appendix B: Scoping Comments Received on the Proposal

The BLM received 222 comment letters during the Scoping Period on the proposal, which was held from June 1 to June 30, 2020. The chart below lists the comment, the number of persons making that comment, and the BLM response to the comment. (Commenters often submitted more than one comment). Organizations and agencies commenting on the proposal are listed by name; private individuals are not listed by name.

# of Comments	Scoping Comment	BLM Response
<i>Comments Generally Opposing Any Restrictions</i>		
144	State general disagreement with the Proposed Action; includes those comments stating that minerals, cattle, vehicles and other recreational uses are the problem and that roped and aerial activities are not the problem. Includes those comments asserting that the BLM has no scientific evidence for this proposal. Many commenters state the importance of their recreation activity to their well-being and how minimal their impacts are.	Other uses in the proposal area are already restricted, including minerals, grazing and motorized and non-motorized vehicle use. The EA delineates these restrictions in Section 1.1. The scientific literature regarding wildlife disturbance is detailed in the EA in Sections 3.2.2, 3.3.2 and 3.4.3. The BLM acknowledges the importance of these activities to the communities that participate in them. This importance is detailed in Section 3.1.2.2.
5	Aerial activities have no impact on wildlife	The scientific literature regarding wildlife disturbance is detailed in the EA in Sections 3.2.2, 3.3.2, and 3.4.2.
1	Mexican spotted owl, Golden Eagles and bighorn sheep are very abundant species and need no protection.	The Mexican spotted owl is listed as a threatened species under the Endangered Species Act by the U.S. Fish and Wildlife Service. Golden eagles are in decline across the west due to habitat loss. The desert bighorn sheep herd in question is unique in that it is the only herd that has survived the introduction of domestic sheep. More information concerning these species is found in Sections 3.2.1, 3.3.1 and 3.4.1
1	While paragliding (in fall) above the space net, birds were not disturbed.	Fall is not the nesting season for raptors, so the observation may not be typical of

		the behavior of raptors during nesting season.
1	Paragliding should not be targeted as it has no impacts.	Disturbances to wildlife are detailed in Section 3.2.2, 3.3.2 and 3.4.2.
1	<p>Drones should not be included in the restricted activities. Any restrictions on launching drones from the canyon rims or flying them from the canyon floors would therefore be utterly ineffective at preventing drones from being flown over the canyons in question, as all a drone operator would need to do to avoid violating the restriction is launch and operate the drone a few hundred feet back from the rim on the Mineral Point or Deadman Point plateaus, where the restriction does not apply. The BLM does not control airspace, and would have no authority to prevent people from flying over the restricted canyons when operating from outside the restricted zone. Cites case law from NPS attempts to restrict drones</p> <p>To ban drones from a broad area of general BLM land that is neither Wilderness nor a Wilderness Study Area would be utterly unprecedented and unjustified by any claimed environmental impact. It would also be extremely difficult to enforce, given widespread motorized access to both the rim areas and the canyon floors and the difficulty of having rangers patrol such large areas looking for people flying drones.</p> <p>There is no evidence of drones causing stress to wildlife. If BLM wishes to adopt a rule that drones cannot harass wildlife, that would be considered. Motorized travel is allowed in the study area – drones are less annoying to wildlife than are motorized vehicles. The BLM cannot just assume that drones harm wildlife.</p>	<p>The BLM understands that the Federal Aviation Administration, and not the BLM, controls the airspace. The restriction would apply only to those drones that would have been launched from or land within the proposed limited area.</p> <p>The impacts to wildlife from human disturbance are detailed in Sections 3.2.2, 3.3.2 and 3.4.2. Drone disturbance is similar to other human disturbances.</p> <p>The BLM acknowledges the difficulty of enforcement. However, as the commenter notes, if aerial and roped activities are not to occur in the area, filming activities would also not be allowed, and drone use would most probably lessen.</p> <p>The Proposed Action restricts drones from taking off or landing within the proposed limitation area. The roads that people might wish to photograph using a drone include the Mineral Bottom switchbacks and the road along the Green River; both of these locations are not within the proposed restriction area.</p>

	<p>There is simply no evidence that drones are causing any serious impacts to wildlife in the canyons in the Hell Roaring Rim area, and broad restrictions on their use are unjustified and unnecessary, not to mention impractical and unenforceable. It seems to me drones are simply getting lumped in with other uses which the BLM is actually worried about impacts from, and that this harmless activity will suffer because of it.</p> <p>In truth, the vast majority of drones being operated in this area are likely being flown to film people engaging in the other activities this proposal is primarily concerned with (base jumping, slacklining, rope swings, etc.). If those activities are restricted, associated drone use will naturally decrease as well without the need for any specific restrictions on drones.</p> <p>The few remaining people flying drones in this area would likely be photographers filming vehicles driving on the roads or just flying to capture the beauty of this incredible area. Any specific problems drones are causing after other activities are restricted could be dealt with on a case by case basis using general rules against disturbing wildlife, etc. without the need for specific restrictions on drone flying within the broad areas outlined in this proposal.</p>	
1	<p>Restricting Mineral and Hell Roaring will mean more activity at the excluded areas (like the Fruit Bowl) and in other canyons (like Spring Canyon). Use will not diminish, but will rather be concentrated.</p>	<p>The purpose and need for the Proposed Action is to maintain currently low recreational use in high-quality breeding and year-round habitats. This area offers less than 4.5% of the desirable geology in the field office and currently supports less than 0.6% of the known climbs in the field office; increases in use concentration is not expected due to limited use and opportunity.</p>

1	The established climbs (like the Witch and the Warlock) should be grandfathered in and not restricted.	These areas contain 0.6% of the 1,095 climbing routes in the Moab Field Office (listed on Mountain Project). A vast array of alternative climbing areas are available. The BLM has crafted an alternative that establishes a permit system with timing limitations for the established climbs, including the Witch and the Warlock
4	State the importance of the Fruit Bowl and asks that it be kept available.	The Fruit Bowl area, as permitted for GGBY in 2017, is excluded from the proposal.
1	Mineral Bottom is a favored spot for BASEjumping.	The Mineral Bottom BASEjumping Focus Area (which includes the Sweet Spot) is excluded from the proposal.
6	Suggests that enthusiasts be asked to voluntarily limit their presence during certain nesting times at certain locations. BLM should provide more educational information about potentially affected wildlife.	The BLM appreciates the suggestion of voluntary limitations and more information about wildlife.
9	The economy of Moab would suffer were this restriction on roped and aerial activities to occur	The BLM acknowledges that every visitor to Moab contributes to the economy. Information concerning the economic impact of visitation is detailed in the Checklist (Appendix A). Without exact visitation numbers to the restricted area, it is impossible to calculate the exact economic contribution of climbers and aerialists utilizing Mineral and Hell Roaring Canyons.
<i>Comments Suggesting Specific Types of Possible Restrictions/Splitting Restrictions on Climbers vs. Aerialists/Excluding Some Specific Areas from Restrictions</i>		
16	Mineral and Hell Roaring Canyons should be kept open for climbers, as they do not have the same impacts as aerialists. Climbers are quieter and recreate in smaller groups resulting in fewer impacts both to wildlife and other people. The numbers of climbers in these two canyons is small and very backcountry in nature. Their impacts are not the same as those of the aerialists.	The BLM acknowledges that there are differences between the two groups. Both aerialists and climbers, however, favor the talus slopes and cliffs that are the escape terrain for desert bighorn sheep and in which raptors nest. The scientific literature regarding wildlife disturbance is detailed in the EA in Sections 3.2.2, 3.3.2 and 3.4.3 and analysis assumptions as they relate to

		climbing activities can be found in Chapter 3.
2	If there must be restrictions, allow certain days of the week for activities to occur. For example, allow “X number of permits per day/week/month with a few blacked out months (perhaps around any breeding seasons)”.	<p>Restriction schemes that offer varying days of the week generally focus on impacts to other people. If, for instance, a person dislikes hiking on a trail with dogs, excluding dogs for two days of the week allows that person to choose a day for hiking a trail when dogs will not be on it. Animals are resident and the impacts upon animals will not be addressed by limiting certain activities to a set of days.</p> <p>The scientific literature regarding wildlife disturbance is detailed in the EA in Sections 3.2.2, 3.3.2 and 3.4.3 and analysis assumptions can be found in Chapter 3 .</p>
10	Suggests seasonal limitations for climbers and aerialists as an alternative to a total ban.	These climbs constitute 0.6% of the 1,095 climbing routes in the Moab Field Office listed on Mountain Project; a vast array of alternative climbing areas are available. The BLM has presented an alternative that provides seasonal limitations (through a permit system) for the established climbs in Hell Roaring Canyon, including the Witch, the Warlock, the Cauldrons, the Gollum and Kachina Spires. See Section 2.3 for this alternative.
23	Suggest that seasonal limitations be imposed on climbers to protect nesting birds and/or bighorn lambing.	The BLM has presented an alternative (Alternative B) that provides seasonal limitations (through a permit system) for the established climbs in Hell Roaring Canyon, including the Witch, the Warlock, the Cauldrons, the Gollum and Kachina Spires. See Section 2.3 for this alternative.
3	Suggest that seasonal limitations <i>and</i> group size limits be imposed on climbers and other enthusiasts to protect wildlife.	The alternative offering seasonal limitations (through a permit system) for established climbs also sets a group size limit. See Section 2.2 for this alternative.

<p>1 Access Fund, FOIC, SL Climbers' Alliance</p>	<p>States that the proposal is too broad. Gives reasons why climbers and highliners are two different types of user groups, especially when concerning backcountry “trad” climbs like the ones in question. “The BLM should not lump rock climbing into the general category “Roped Activities” because it is abundantly clear that different activities (that happen to use ropes) necessitate different management strategies and restrictions with regard to wildlife”.</p> <p>Known climbs are in Hell Roaring Canyon: Witch, Warlock, North and South Kachina Spires, Gollum and Cauldron and Corner Tower. State that seasonal limitation are sufficient to protect raptors. Asks for any research that shows that desert bighorn sheep are susceptible to impacts from climbers.</p> <p>“With this in mind, we believe that the BLM should 1) not prescribe a blanket prohibition without a scoping period and draft Environmental Assessment, 2) conduct a site specific scientific analysis of wildlife and social conditions, and 3) develop management alternatives as per the National Environmental Policy Act before promoting an unsubstantiated management prescription without public input. As climbing advocacy and stewardship organizations, we strive to balance recreation access with resource protection. We encourage you to follow the 5 standards that have been in place for many years by following a science-based approach that protects sensitive habitat during sensitive times, versus a blanket closure.”</p>	<p>These climbs constitute 0.6% of the 1,095 climbing routes in the Moab FO listed on Mountain Project; a vast array of alternative climbing areas is available.</p> <p>This area also supports important year-round, breeding and winter use for the species analyzed.</p> <p>The scientific literature regarding wildlife disturbance is detailed in the EA in Sections 3.2.2, 3.3.2, and 3.4.2.</p> <p>The Corner Tower has been excluded from the proposed restricted area.</p> <p>An alternative has been crafted that imposes seasonal limitations on the known climbs in Hell Roaring Canyon, including the Witch, the Warlock, the Cauldron, the Gollum and the two Kachina Spires. This alternative requires that climbers obtain a permit from the Moab Field Office; the permit would impose group size limits within the climbing season. The alternative is detailed in full in Section 2.2.</p> <p>Research on the effects of human activity on desert bighorn sheep are detailed in Section 3.4.2.</p> <p>The BLM has conducted a Scoping Period (June 1 – June 30, 2020) and presents this Environmental Assessment for public review. As a result of information received during Scoping, the BLM has crafted an alternative with seasonal restrictions on known climbs rather than a “blanket closure” on these climbs.</p>
<p>1</p>	<p>Suggest that seasonal limitations be imposed on all recreationists, if they are to be imposed for climbers.</p>	<p>Other recreation uses in Mineral and Hell Roaring canyons are very sparse. There are no designated routes in the majority of Mineral Canyon; the route in</p>

		Hell Roaring Canyon is being considered as part of the Labyrinth Rims Travel Management Plan, which is on-going.
3	Suggest a permit system for climbers and/or aerialists.	The permit system comprising Alternative B is explained in Section 2.2.
2	Suggests allowing climbing as day-use only in Hell-Roaring Canyon.	The permit system comprising Alternative B is explained in Section 2.2.
15	Suggest seasonal limitations for aerial activities.	While known climbs are specific points, aerial activities are more far ranging. Seasonal limitations (with permits and a group size limit of 4) was formulated for six climbs in Hell Roaring Canyon. The highlining areas were not seen as amenable to this solution for Alternative B.
1	Suggests group size limitations on aerialists; do not allow dogs or the collection of firewood. Portable toilets should be required. Violations of rules should mean confiscation of gear.	The enactment of group size limits for aerialists was considered, but not seen as a viable alternative.
1	Supports the Access Fund's compromises on the proposal.	Alternative B attempts to represent the compromises proposed by the Access Fund.
1	Please find another way to protect the wildlife – see what other areas have done.	Protecting wildlife can take many forms. The BLM has already reduced grazing in the two canyons; oil and gas leasing is subject to a No Surface Occupancy Stipulation, and motorized users must stay on the designated roads (which are few). The current proposal attempts to proactively manage a relatively new form of recreation that is increasing in a very important wildlife area.
1	Allow climbing on the Kachina Towers, Witch, Warlock and Cauldrons unless it directly conflicts with nesting birds. Try to strike balance between needs of wildlife and climbing access. There are also some little known climbs in Mineral Canyon.	An alternative has been crafted that imposes seasonal limitations on the known climbs in Hell Roaring Canyon, including the Witch, the Warlock, the Cauldron, the Gollum and the two Kachina Spires. This alternative requires that climbers obtain a permit from the Moab Field Office; the permit would impose group size limits within the

		<p>climbing season. The alternative is detailed in full in Section 2.2.</p> <p>The BLM received no specific information about climbs in Mineral Canyon.</p>
1	Consider excluding 5 additional highlining areas in Hell Roaring Canyon and “several” in Mineral Canyon (no exact locations given).	Two highlining areas (Green River and Waterslide) have been excluded from the restriction area.
1 (Slackline US)	Institute needed seasonal closures in cooperation with the slacklining community. If this is not possible, at the very least please exclude the Highlands Bowl, the Green River area, the Colorado Bowl and the Waterslide from the proposed restrictions (maps provided. Slackline US understands that access is not guaranteed, but would like consideration given to the areas listed above. Our organization understands the importance of balance and wishes to work on the solution.	<p>The Green River Area and the Waterslide were excluded from the proposed restrictions.</p> <p>The Highlands Bowl and the Colorado Bowl pose wildlife concerns that are not soluble with seasonal closures due to their location, size and the numbers of people who wish to use them.</p>
1	Suggests closing the road along the Green River so that aerialists and climbers have to work harder to access their locations.	The road along the Green River is outside the restricted area; the BLM has been told that climbers access the climbs in Hell Roaring Canyon from the rim on the top. Aerialists also access their activities from the top, not from the road along the Green River.
<i>Comments Generally Supporting Restrictions</i>		
22	States general support for the Proposed Action. Many applaud the “proactive management proposal.” Wildlife should be protected from the encroachment of impacting activities. Wildlife need protection and space. Recreationists do not have to inhabit every bit of wildlife habitat. Many commenters note the increase in recreation use and its encroachment into wildlife habitat. Cite the present effort as a good attempt to provide balance.	The impacts to various wildlife species as a result of the alternatives are detailed in sections 3.2.2, 3.3.2 and 3.3.4.

<p>1 (USFWS)</p>	<p>Details the impacts of human disturbance on raptors, including golden eagles and Mexican spotted owls. Summarizes the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, as well as the Mexican Spotted Owl Recovery Plan. States that: <i>“Human disturbance is a primary threat to raptor populations that may generate a range of adverse impacts to the fitness, occupancy, and population rates of golden eagles, Mexican spotted owls, and other raptors depending on the type of disturbance (Hansen et al. 2017, Romin and Muck 2002). It is documented that rock climbing activities impact cliff-nesting raptors when activities are in close proximity to nests because of shouting and other noises involved with the activity, and the high sensitivity of birds to human activities occurring above them (Hansen et al. 2017). Other roped and aerial activities likely impart a similar level of impact to raptors when these activities occur in close proximity to nests”</i>.</p> <p>The Service concludes: <i>“The proposed action would help reduce the threat of roped and aerial recreational activities to Mexican spotted owls, golden eagles and raptor populations in the action area. The proposed action is also consistent with recovery actions (6.7.2 and 6.7.3) in the Mexican spotted owl 3 recovery plan (USFWS 2012). We believe the proposed action will maintain or improve the status of the Mexican spotted owl in the action area.”</i></p>	<p>The BLM appreciates the research references provided by the U.S. Fish and Wildlife Service. In addition, the consistency of the proposal to the Mexican Spotted Owl Recovery Plan is noted.</p>
<p>1 -Utah Div. of Wildlife Resources via PLPCO</p>	<p>Desert bighorn are an iconic species. The area proposed for closure is within the UDWR’s LaSal/Potash/South Cisco desert bighorn sheep management unit, which is at 74% of its population objective. Human disturbance results in habitat degradation and displacement; stress is especially impactful when ewes are giving birth to lambs or when combined with disease events. The State recommends no roped or</p>	<p>The BLM has noted the adherence of the proposal to the UDWR’s statewide bighorn sheep plan, as well as to Utah’s Wildlife Action Plan as Species of Greatest Conservation Need.</p>

	<p>aerial activities during lambing season. Working with federal agencies to protect bighorn habitat is recommended in UDWR's statewide bighorn sheep plan.</p> <p>The area also provides nesting habitat for multiple raptor species included in Utah's Wildlife Action Plan as Species of Greatest Conservation Need. These species include the Golden Eagle, Mexican Spotted Owl and Peregrine Falcon. The USFWS has documented the effects that human activities have on raptors. The State recommends no roped or aerial activities during critical nesting months, which go from January through July.</p>	
1 (Wild Sheep Foundation)	<p>Despite over 40 years of restoration efforts, Utah bighorn populations fall well short of historic numbers. In this fashion, bighorn sheep within the La Sal, Potash/South Cisco desert bighorn sheep management unit are currently at 74% of the desired population objective. The adverse impacts associated with human disturbance is well documented in the literature.</p>	<p>The BLM has acknowledged that the population objective of the desert bighorn sheep herd in the area has not been met.</p>
2	<p>These canyons are a stronghold for desert bighorns in our Potash herd. Many ewes will have and raise lambs in this area. This bighorn herd harbors a variety of pathogens including <i>M.ovi</i>, and has experienced respiratory disease events in the past. Considering the rapid increase in human recreation in this area, the UDWR supports the proposed restriction to reduce stress and displacement of the bighorns in this area.</p>	<p>The impacts to desert bighorn sheep from this type of activity are detailed in Section 3.4.2.</p>
1 (Raptor Inventory Nesting Survey)	<p>Notes that RINS has performed surveys for raptors in the project area. RINS as found 84 nest locations in Mineral and Hell Roaring Canyons (map provided). Nests have been recorded from the following species: Golden Eagle, Peregrine Falcon, Prairie Falcon, Great Horned Owl, and Red-tailed Hawk. RINS surveyors have witnessed the adverse effects of human presence on these nests. Most notable among these adverse impacts is the problems with</p>	<p>The BLM acknowledges the impacts of such activities to raptors. See Section 3.3.2.</p>

	<p>Golden Eagle nests in the vicinity of the Fruit Bowl. Human disturbance, even at a significant distance, can have a devastating impact on nesting raptors. It should be noted that the Golden Eagles that were nesting in the side canyon near the Fruit Bowl have never returned to the nest. Finally, the impact of human disturbance is not limited to the nesting season and human disturbance can disrupt raptor activity resulting in the total abandonment of an area.</p> <p>This proposal offers the BLM and opportunity to manage the Mineral and Hell Roaring Canyons with wildlife as the priority. There are many other areas that are suitable for recreation and entertainment and fewer and fewer that provide for wildlife. Statewide, we are witnessing the decline of raptor populations as a result of habitat loss. The impacts of visitors who come for the extraordinary landscapes, including the opportunity to view wildlife and specifically these magnificent birds, requires careful management or these opportunities will be lost.</p>	
1 (SUWA)	<p>Provides research on disturbances to bighorn sheep from recreation activities. Notes the importance of the genetic diversity of the desert bighorn herd in question. Research shows that increased human activity causes bighorn populations to decline (research provided). Bighorn display increased vigilance when activities are present, leading to stress and decreased productivity.</p>	The BLM appreciates the research provided by the commenter.
1 (SUWA)	<p>Cites decisions in the 2008 Moab RMP that support the Proposed Action:</p> <ul style="list-style-type: none"> • <i>Habitat Management Plans- WL-1:</i> Continue to implement and modify three Habitat Management Plans (HMPs) summarized in Appendix U: Hatch Point HMP, Dolores Triangle HMP, and the Potash-Confluence HMP. • <i>WL-18:</i> Raptors will be managed under the auspices of Best Management Practices (BMPs; see Appendix R), which 	The BLM acknowledges the guidance of the Moab Resource Management Plan (2009) in Section 2.5.

	<p>will include implementation of spatial and seasonal buffers. These BMPs implement the USFWS's Guidelines for Raptor Protection From Human and Land-use Disturbances, with modifications allowed as long as protection of nests is ensured. Seasonal and spatial buffers are also listed in Appendix R. Cooperate with utility companies to prevent electrocution of raptors. Temporarily close areas (amount of time depends on the species) near raptor nest to rock climbers or other activities if the activity could result in nest abandonment.</p> <ul style="list-style-type: none"> • <i>Bighorn Sheep Habitat- WL-29:</i> Follow the recommendations found in the BLM Bighorn Sheep Rangeland Management Plan, as revised (1993b); the Utah BLM Statewide Desert Bighorn Sheep Management Plan, as revised (1986a); and the Revised Guidelines for the Management of Domestic Sheep and Goats in Native Wild Sheep Habitats (BLM 1998a). • <i>Bighorn Sheep Habitat- WL-30:</i> Support the current bighorn sheep population and manage to increase desert bighorn population (prior stable numbers) on 330,892 acres... • <i>REC-48:</i> All SRPs will contain standard stipulations appropriate for the type of activity and may include additional stipulations necessary to protect lands or resources, reduce user conflicts, or minimize health and safety concerns. • <i>WL-18:</i> Raptors will be managed under the auspices of Best Management Practices, which will include implementation of spatial and seasonal buffers. These BMPs implement the USFWS's Guidelines for Raptor Protection From Human and Land-use Disturbances, with modifications allowed as long as protection of nests is ensured... Temporarily close areas (amount of time depends on the species) near raptor nest to rock climbers or other activities if the activity could result in nest abandonment. 	
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	<ul style="list-style-type: none"> • <i>SSS-10</i>: As required by the Endangered Species Act, work with UDWR to implement the Utah Wildlife Action Plan (UDWR 2005a) to coordinate management actions that will conserve native species and prevent the need for additional listings. • <i>SSS-15</i>: As required by the Endangered Species Act, plan and implement assessment and monitoring plans for T&E and BLM Sensitive species. • <i>Mexican Spotted Owl (MSO)- SSS-20</i>: If BLM determines that a proposed action may affect MSO or its habitat, consultation with the USFWS will be initiated. Monitor and protect known Protected Activity Center (PAC) sites according to USFWS recommendations and MSO Recovery Plan. Manage habitat for MSO according to USFWS and UDWR recommendations and recovery plans. Develop cooperative agreements with other agencies and entities to inventory and monitor existing potential habitat and annually schedule assessment plans of MSO habitat to determine quality of habitat and presence of species. Protect occupied and potential habitat, including designated critical habitat for the MSO, by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are Required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A). These stipulations will preclude temporary activities within designated critical habitat from March 1 through August 31. Permanent actions are prohibited year-round within 0.5 miles of a PAC. • <i>Golden Eagle- SSS-29</i>: Known golden eagle nest sites will be protected according to the Bald and Golden Eagle Protection Act amended in 1978. Acquire lands with nest and roost sites through land 	
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	<p>exchange or acquisition. Conduct assessments of wintering golden eagle habitat. Protect golden eagle nest sites and habitat (12,902 acres) by applying the standard terms and conditions developed in consultation with the USFWS for oil and gas leasing and other surface-disturbing activities (see Standard Terms and Conditions [Lease Notices] which are required to Protect Special Status Species and to Comply with the Endangered Species Act, Appendix A). These stipulations will preclude surface-disturbing activities within 0.5 miles of documented nest sites from February 1 to July 15.</p> <p><i>Moab RMP, Appendix R: Best Management Practices for Raptors and Their Associated Habitats in Utah</i></p>	
1 (SUWA)	<p>BLM must also consider these actions in the Range of Alternatives:</p> <ul style="list-style-type: none"> Prohibit takeoff and landing completely at the Mineral Bottom airstrip during rutting and lambing season to protect bighorn sheep. <p>Closes Mineral and Hell Roaring Canyons and their rims to motorized use.</p> <p>Controls, restricts, or seasonally closes dispersed camping in Mineral and Hell Roaring Canyons and along their rims to protect bighorn sheep, raptors, and Mexican spotted owl nesting sites.</p>	<p>The Mineral Bottom Airstrip is not within the area of the Proposed Action.</p> <p>Motorized use in the area is under consideration in the court-mandated Travel Management Planning process that is currently underway.</p> <p>Dispersed camping in the Proposed Area is restricted to designated sites in the Supplementary Rules accompanying the 2008 Moab RMP. The BLM acknowledges that the on-the-ground marking could be improved.</p>
1 (SUWA)	<p>NEPA requires that BLM take a hard look at the impacts resulting from its proposal, including impacts to wilderness-quality lands; impacts to lands proposed for wilderness in America's Red Rock Wilderness Act; impacts to natural and cultural resources; and impacts to other users within the vicinity of areas subject to use under the proposal. This includes noise and visual impacts and the potential for harm to BLM's target outcomes for the Labyrinth Rim/Gemini Bridges SRMA—</p>	<p>The proposal would not impact visual resources or lands with wilderness characteristics. The beneficial impacts of the proposal on other types of recreation users are acknowledged in Section 3.1.2. The EA acknowledges that visitation is likely to grow, although it is impossible to project by how much; additionally, predicting the growth in any one type of recreation use is not possible without extensive survey data.</p>

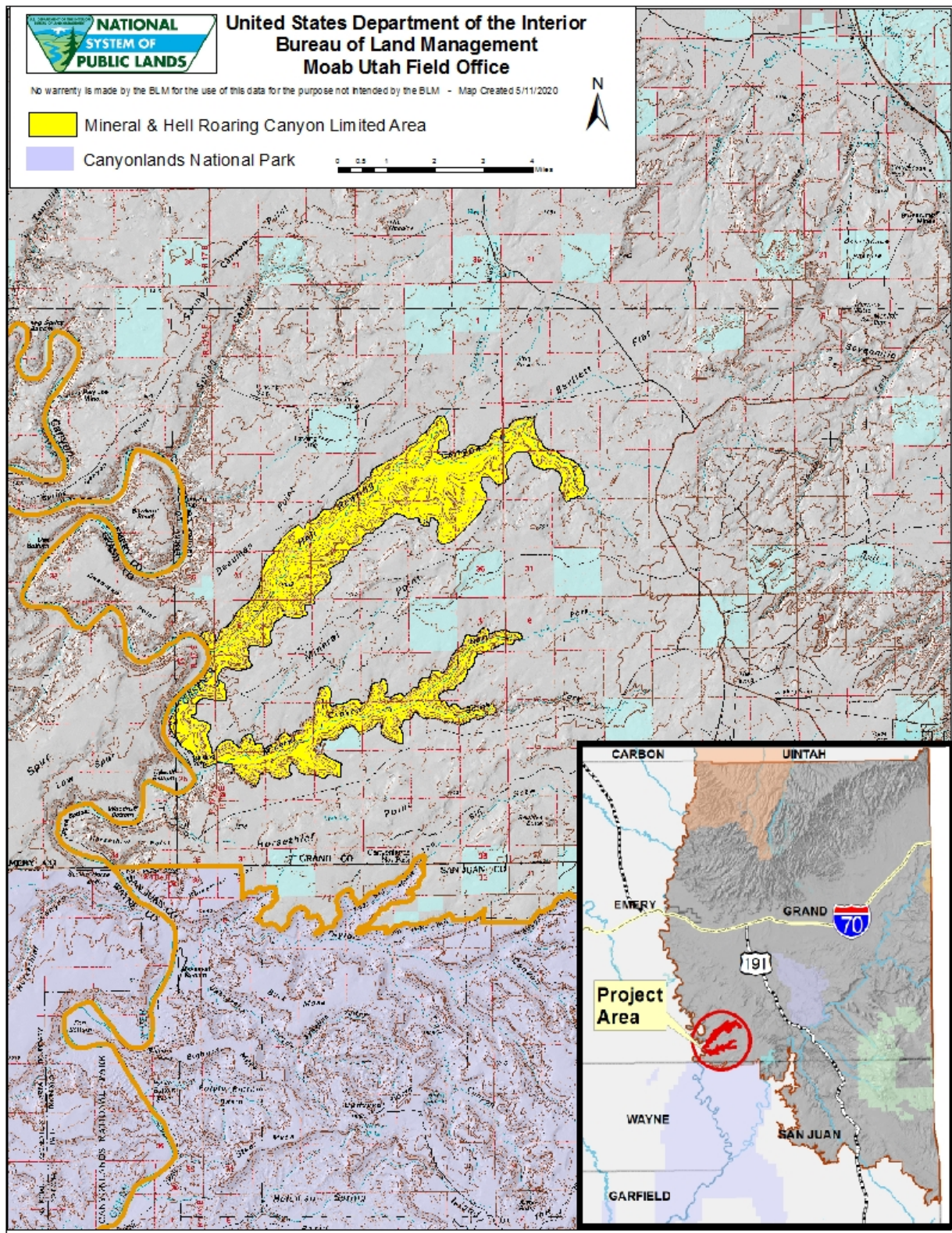
	<p>which include quality experiences for visitors engaging in river recreation, camping, hiking, scenic driving, mountain biking and backcountry driving.</p> <p>Pursuant to NEPA, BLM must analyze indirect effects such as the growth in visitation, recreational impacts and use by both individual visitors and SRP holders, and future SRPs in the area. This analysis must include the potential for growth-inducing impacts—for example, that ongoing or future permitted activity in Mineral and Hell Roaring Canyons and on their rims will open the door to additional, similar use in the future by other commercial operators.</p> <p>BLM must take a hard look at other past, present, and reasonably foreseeable uses and management actions that may impact the environment, and analyze these impacts in light of the proposal.</p> <p>BLM must take a hard look at the adverse impacts to wildlife resulting from all manner of human recreational impacts, including motorized use, in an area that includes critical rutting, breeding, and migration habitat for several sensitive species including desert bighorn sheep, raptors, and Mexican spotted owl.</p>	
1	<p>Cites research done by Idaho Department of Fish and Game regarding impacts to bighorn. Provides long list of research studies. States importance of this particular bighorn herd, and notes that activities that herds habituate to are not as impactful as unexpected activity in their “space”.</p> <p>Concludes by stating: “Mineral and Hell Roaring Canyons currently provide important, largely undisturbed, lambing and rutting habitat for the native Potash bighorn sheep herd. Based on an extensive literature, some of it cited in the passages above, it is clear that increased human activity in the canyon would likely impact bighorn survival</p>	The BLM thanks the commenter for the research studies provided.

	and reproduction, negatively impacting the viability of the Potash herd. The current proposal to restrict roped and aerial activities in the two canyons, limiting additional disturbance of the bighorn sheep that use the canyon, is an important step in ensuring the long-term survival of this irreplaceable herd.”	
1	Provides evidence and photographs of bighorn being disturbed by aerialists on rim above Mineral Canyon. Especially noteworthy because it was evident that the ewes in question were pregnant. States results of disturbance to bighorn pregnancy. Notes importance of this bighorn herd.	The BLM thanks the commenter for the anecdotal evidence provided of bighorn disturbance by aerialists.
1	Provides two scientific peer reviewed papers on bighorn population viability and aerial activities. One paper is in the journal <i>Conservation Biology</i> and the second in the journal <i>Biological Conservation</i> .	The BLM thanks the commenter for the research studies provided.
3	It is well known that both canyons provide many nesting sites for various species of raptors and a very important piece of habitat for a unique desert bighorn herd. There are other areas that recreationists can use for roped and aerial activities, but this area is THE habitat of this remnant herd of bighorn sheep.	Comment acknowledged.
1	Limiting use on only 10,000 acres (the best of the wildlife habitat) still leaves plenty of space for recreational activities.	Comment acknowledged.
1	As a RINS volunteer, I have found bolts in obscure locations that are very near raptor nests. I’ve observed that highlining often involves loud music, noise and other disturbances to wildlife. Allowing nearly every use everywhere diminishes the quality of experience for everyone. Limiting high angle/extreme sports to designated areas within Mineral and Hell Roaring Canyons, such as the original Fruit Bowl highline area and the Sweet Spot base jumping area makes sense.	The BLM acknowledges the comment.

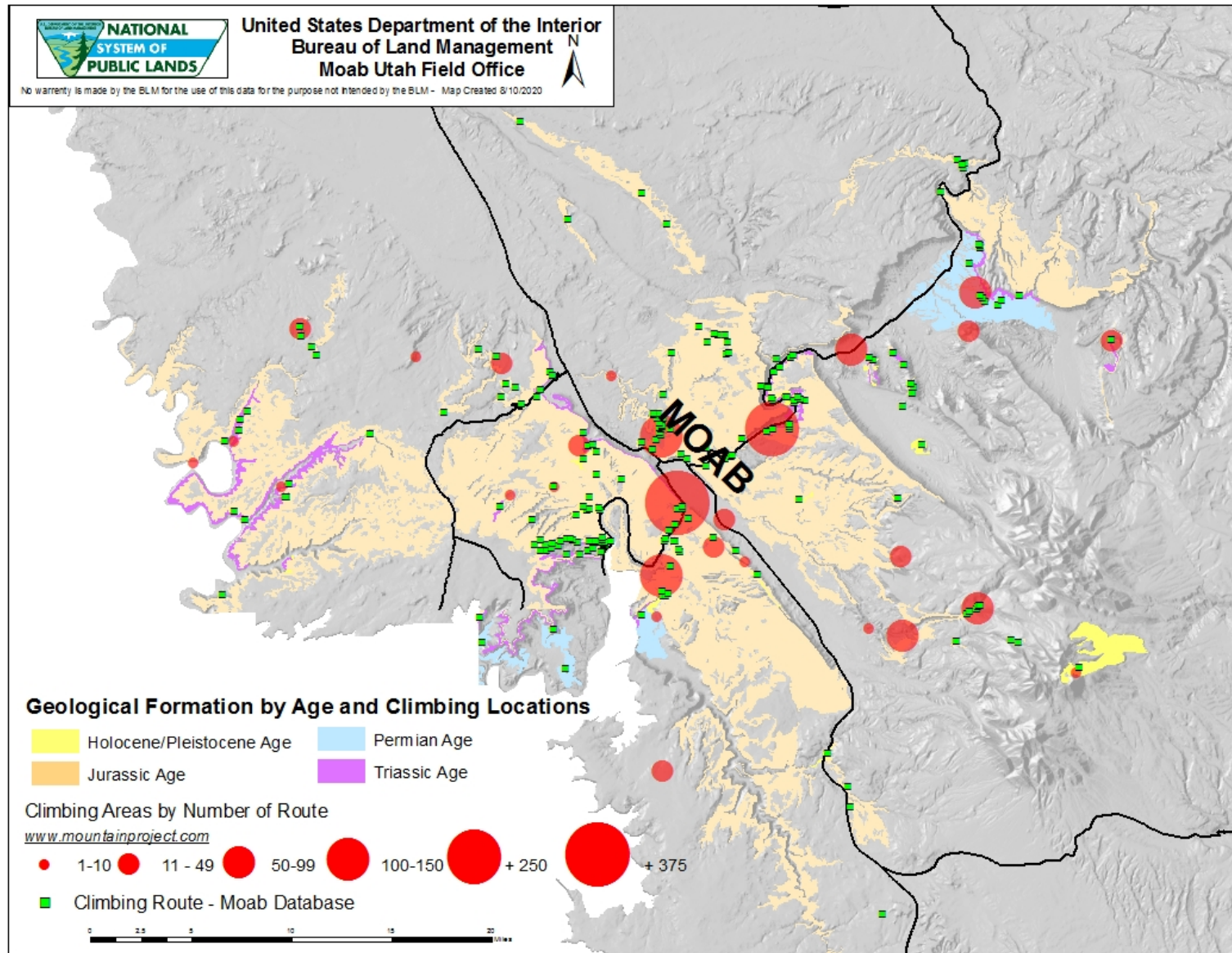
1	<p>Climbing within these two canyon systems is not particularly popular. The routes are lesser-known and seldom used compared to others in the area. Mountain Project maintains lists of climbing routes throughout the US on their website (mountainproject.com). There are two climbing areas shown in Hell Roaring Canyon with a total of 6 routes (Witch/Warlock/Cauldrons and the Kachina Spires). There are none listed in Mineral Canyon.</p> <p>While a climber might be disappointed about 6 routes in these two canyons being closed to climbing, there are many other routes available nearby. Mountain Project lists a total of 2,846 climbing routes in the “Moab area” as well as 1,347 at Indian Creek, 60 in Castle Valley, and 52 at Fisher Towers. There are many other places on public lands in the Moab area where various roped and aerial activities are already taking place and are available for public use.</p>	<p>The six routes provided by the commenter have been noted in the EA. The BLM acknowledges the many other climbing opportunities available in the Moab area.</p>
2	<p>Limiting these activities would also benefit other quiet users such as hikers. Cites discovering “50 to 100 large, shiny slack-lining bolts spread out along roughly 50 yards of canyon rim -- a sort of mini "fruit bowl". This was an ugly mess and definitely detracted from my attempts to try to enjoy the natural scenery.” Also cites the multiple trailing found around this and other highlining areas. Cites the need to close more roads in the area – including the road up Hell Roaring, in Mineral and along the Green River north of the airstrip.</p>	<p>The beneficial impacts to other recreation users is stated in Section 3.1.2.</p> <p>The issue of designating roads in the area is being considered in a court-mandated Travel Plan process for the entire Labyrinth Rims/Gemini Bridges SRMA. This process is on-going and should be concluded by the end of 2021.</p>
1	<p>Slacklining, ziplining, high-lining, rope swinging and aerial activities (including drone flying) should be restricted in the entire MFO, and allowed only in designated areas.</p>	<p>The BLM did consider an alternative restricting such activities in a larger area (110,000 acres),but did not carry this alternative forward. See Section 2.4.</p>
1	<p>Users should be required to clean up after themselves – and to pay for all their impacts to habitat.</p>	<p>Clean-up of use is already required by law.</p>

Appendix C - Maps:

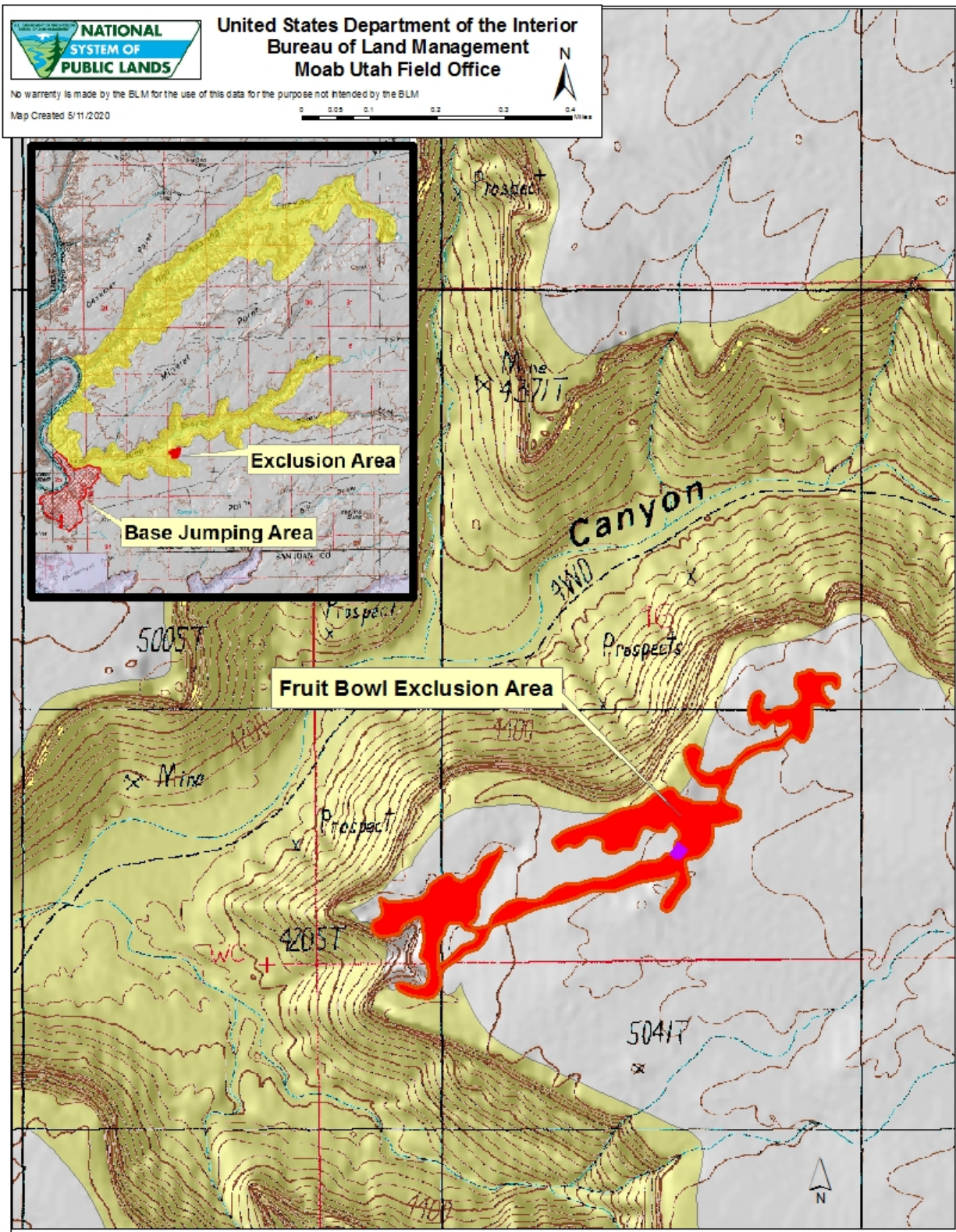
Appendix C: Map 1: Proposed Restriction Area in Mineral and Hell Roaring Canyons



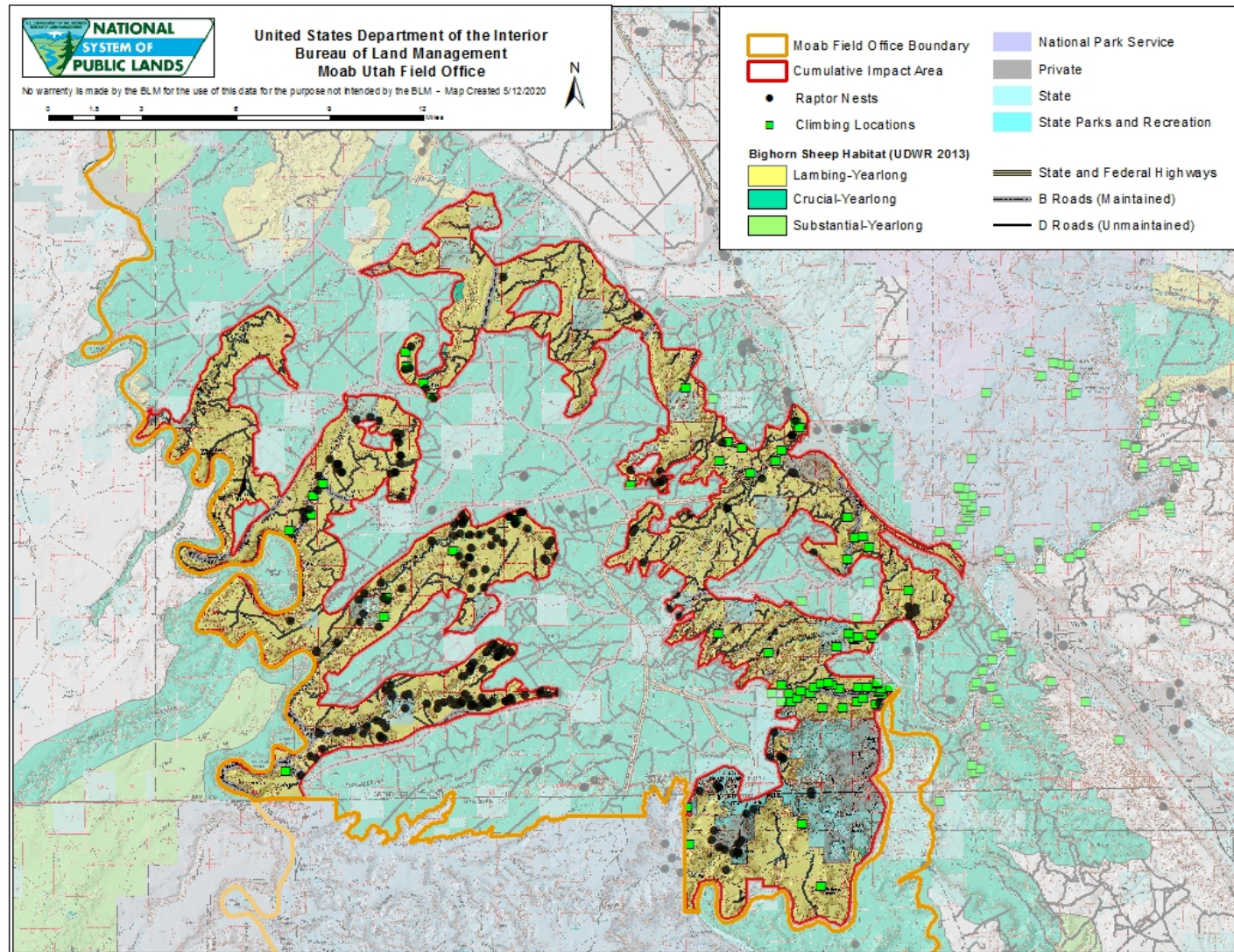
Appendix C: Map 2: Climbing areas and supporting Geology



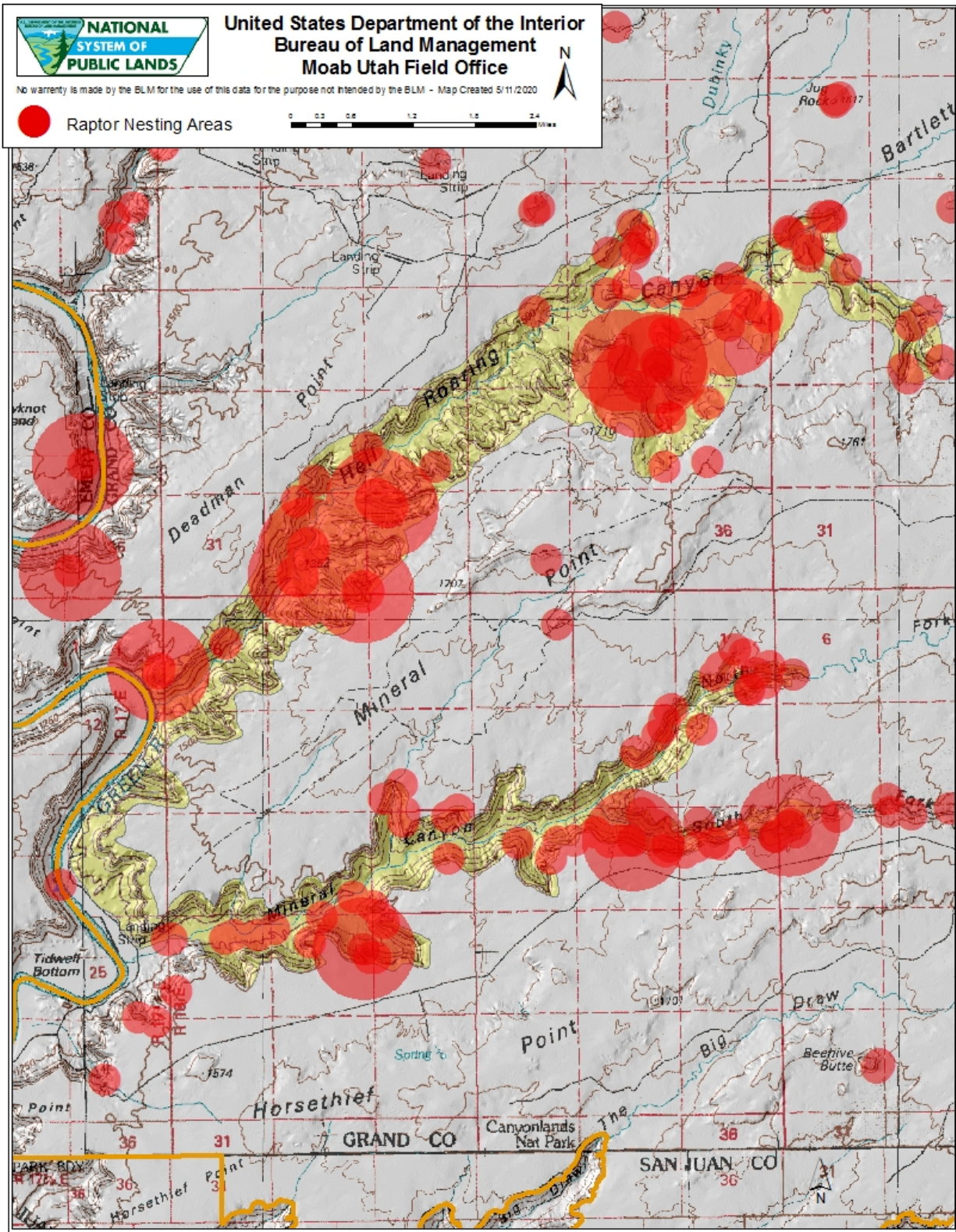
Appendix C: Map 3: Detailed Map of Proposed Exclusion Area at the Fruit Bowl



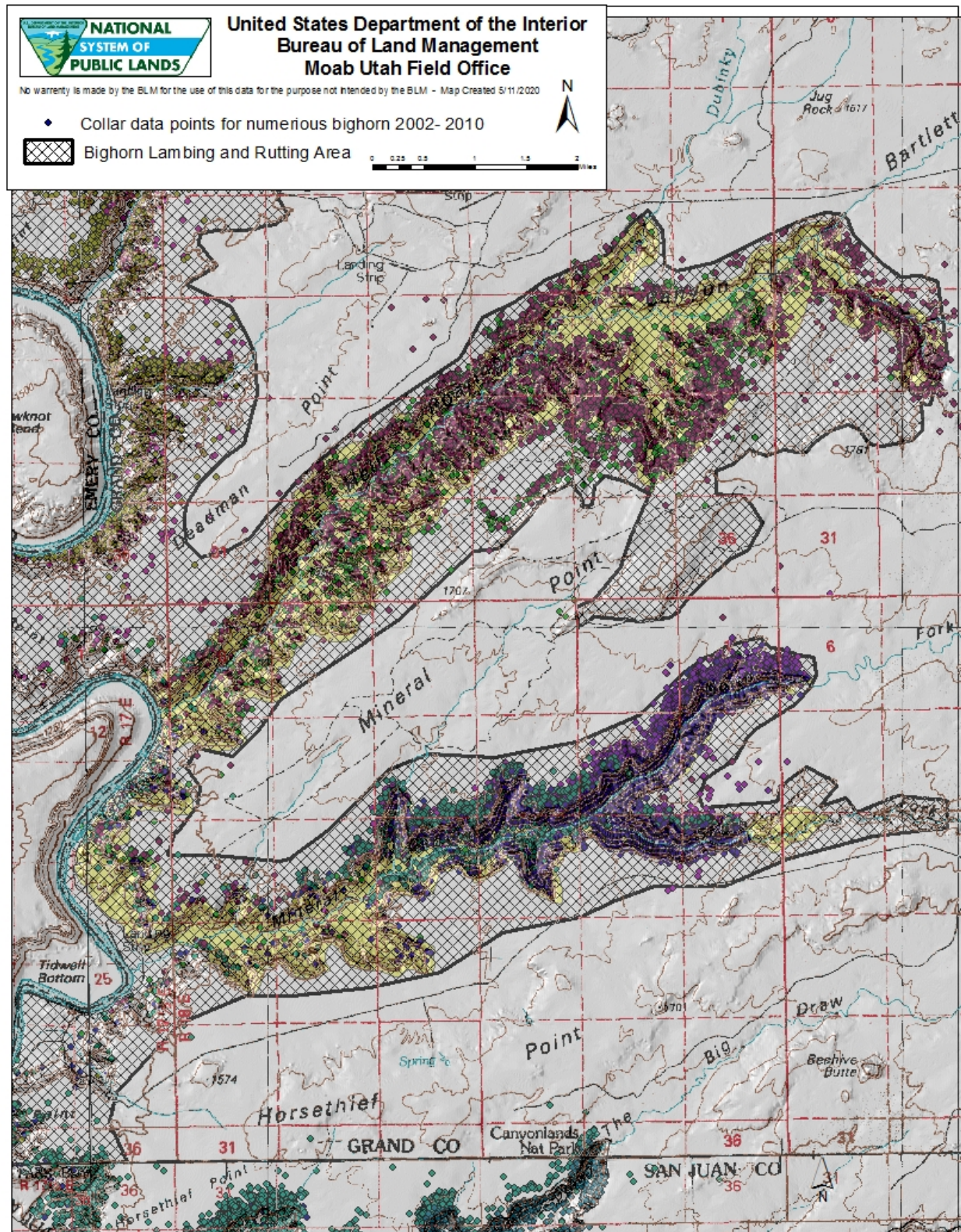
Appendix C: Map 4: Cumulative Impact Area



Appendix C: Map 5: Nesting areas of Raptors, including the Mexican Spotted Owl within the Proposed Restriction



Appendix C: Map 6: Crucial Lambing and Rutting Habitat for Desert Bighorn Sheep



Appendix D: Comments Received during Comment Period on the Environmental Assessment

The BLM announced a formal public comment period following release of Environmental Assessment DOI-BLM-UT-Y010-2020-0068: “Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons”. The comment period was offered between August 18, 2020 and September 21, 2020. The BLM received 13 comments during the comment period. The chart below lists the person or group making that comment, the comment, and the BLM response to the comment.

Commenter	Comment	BLM Response
Access Fund, Friends of Indian Creek, Salt Lake Climbing Alliance.	Restricting roped activities on 10,000 acres would be the first of its kind in the country. Only about 50 climbers visit the area annually, making this restriction overly broad for the climbing community. <i>Note: when “Access Fund” is referred to in this appendix, we include in that the Friends of Indian Creek and the Salt Lake Climbing Alliance.</i>	The BLM has chosen Alternative B in its decision; this allows limited seasonal climbing access to the known climbing locations within an approximately 10,000 acre area which was identified during scoping. Management under Alternative B is not broad as this area comprises less than 0.5% of the field office area, 4.5% of the canyon and cliff type topographic features suitable for climbing and 0.6% of the known climbs. These known climbs will be available to climbers on a seasonal basis as part of the decision at the current use levels identified during scoping.
Access Fund et al.	The Access Fund accepts that Mineral and Hell Roaring Canyons are important wildlife habitats, but “remain unconvinced that a public access restriction on rock climbing is necessary”. Questions why hikers are not similarly being restricted, and why livestock grazing is not subject to these restrictions.	The scope of this EA as defined by the Purpose and Need, identifies activities that ‘ <i>access into these limited remaining escape terrains and nesting sites</i> ’ that consist of otherwise ‘ <i>inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes</i> ’. These areas are generally not accessible by hikers, or other recreation users that do not use ropes or aerial delivery. Cattle grazing has previously been reduced; in addition, cattle, hikers and vehicles cannot access the identified cliff habitats critical to these species.
Access Fund et al.	Climbers should not be subject to the same restrictions that are proposed for highliners and BASE jumpers.	The EA targets activities that “ <i>access into these limited remaining escape terrains and nesting sites</i> ” and create disturbances to wildlife in otherwise “ <i>inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes</i> ”. Climbers, highliners, BASEjumpers and other similar roped and aerial activities enthusiasts all utilize these

		environments. They rely on ropes and aerial delivery to access those otherwise “inaccessible” areas. Alternatives were developed to “find a balance between recreational uses that access otherwise inaccessible portions of critical wildlife habitat” as noted in the Purpose and Need section of the EA.
Access Fund et al.	Research on wildlife disturbance presented in the EA does not pertain especially to climbers. Since “the BLM has well-established and effective practices within Utah’s Moab and Monticello Field Offices for seasonal climbing restrictions to protect raptors”, the Access Fund is convinced that the restriction proposed is targeted to protect desert bighorn sheep.	<p>The EA provides analysis assumptions that cite peer reviewed and scientific research documents outlining how human disturbance results in alteration in ungulate and raptor behavior and energetics. Activities that involve roped and aerial delivery into otherwise inaccessible areas create human disturbance.</p> <p>The EA analyzes recreational activities that ‘<i>access into these limited remaining escape terrains and nesting sites</i>’ that consist of otherwise ‘<i>inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes</i>’. Climbing is one of several activities that occurs in these identified habitats.</p> <p>The Moab Field Office has very limited voluntary seasonal climbing avoidance areas; the identified Purpose and Need statement directs the Moab BLM to proactively manage recreationists in the vicinity of Mineral and Hell Roaring canyons, where critical habitats and sensitive resource values exist. If climbers can readily abide by voluntary seasonal restrictions, required seasonal restrictions should be no more onerous.</p> <p>The EA targets several species, including raptors, golden eagles, and Mexican spotted owl (a threatened and endangered species) as well as desert bighorn sheep.</p>

Access Fund et al.	The BLM asserts that only 0.6% of climbing routes in the MFO would be limited, but not all climbs can be weighted equally. The climbs in Hell Roaring are classic tower climbs that are remote, technically difficult and infrequently visited. Thus, restricting these climbers “will likely have very little benefit to the purpose and need of this EA.	There are over 1,095 known climbs in the Moab FO; climbing activity in Hell Roaring is a very small percentage of this activity (fewer than 50 climbers per year according to the Access Fund’s estimates). Imposing a permit requirement and seasonal restrictions would have a very small impact on the current climbing community. The purpose and need of the EA is to “secure the continued use of important wildlife habitats by developing limitations on recreation activities.” Thus, managing the number, location and routes of climbers in Hell Roaring Canyon would proactively secure these habitats at current levels of use.
Access Fund et al.	The Access Fund is opposed to Alternative A (blanket restriction) and asserts again that backcountry traditional rock climbers will not have a detrimental effect on desert bighorn sheep.	The BLM has chosen Alternative B, which allows for permitted seasonal access to the six traditional rock climbing venues in Hell Roaring Canyon. As noted above, the EA provides analysis assumptions that cite peer reviewed and scientific research documents outlining how human disturbance results in negative alteration in ungulate and raptor behavior and energetics.
Access Fund et al.	<p>The Access Fund believes that “Alternative B is a big improvement over Alternative A”, but has the following questions:</p> <p>Why would hiking remain unrestricted? How would the permit process work (how far in advance, how much flexibility, how many permits would be distributed to commercial outfitters)? Why are the approach routes required to be from above? Where are the desert bighorn escape routes and are they near the known climbs? What is the justification for the time periods and the number of permit days for each of the climbs? How will the BLM know that the limitations are successful?</p>	<p><u>Why would hiking remain unrestricted:</u> Hiking does not typically access ‘<i>inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes</i>’. It is therefore not within the scope of this EA.</p> <p><u>How would the permit process work:</u> The BLM will set up a permit system whereby climbers could obtain permits, either by phone or on-line. Permits would be issued up to six months in advance. Outfitters would be able to request a permit as well as private individuals; no more than two of the 35 permits issued per year could be held by any one person or outfitter in any one season. Details of the permit process are outlined in Appendix E in the EA.</p> <p><u>Why are the approach routes required to be from above;</u> Permits provide defined uses, which, in this situation, will define climbing</p>

		<p>areas and access to facilitate management of the permit. The approach routes to the three climbing areas (containing six climbs) in Hell Roaring were suggested by the Access Fund. The Fund stated that the Witch/Warlock/Cauldron and the Gollum were usually approached from the rim, while acknowledging that some people did hike up the canyon to get to these climbs. The Fund indicated that Kachina Towers were always approached from the rim. Establishing a consistent route by approaching the climbs from the rim would be less disturbing to both raptors and desert bighorn sheep, as the nesting sites, escape terrain and inaccessible habitat would be utilized less than when walking up the canyon and ascending the talus slopes and cliff face. In addition, approach from the rim concentrates use, making the presence of humans more predictable and less stressful to the animals. To protect the species listed in the EA, approach from the rim will be specified as part of the permit.</p> <p><u>Where are the desert bighorn escape routes?</u> the entire area is '<i>escape terrain</i>' as desert bighorn use this entire area for foraging, lambing, rutting and other daily and season needs. When startled, bighorn typically head up a talus slope – no one talus slope or sets of talus slopes constitute escape terrain – all the talus slopes in the area are utilized as escape terrain.</p> <p><u>Are they near the known climbs:</u> Yes</p> <p><u>What is the justification for the time periods and the number of permit days?</u> The time period is outside of nesting, lambing and rutting periods. These time periods are established by the U.S. Fish and Wildlife Service (for raptors) and by the Utah</p>
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		<p>Division of Wildlife Resources (for bighorn sheep).</p> <p>The number of permit days were established for each of the climbs. Information provided by the Access Fund indicated the level of use. The intent of the action is to curtail the growth of recreational activities in the targeted habitat area. The BLM will allow the current use levels as estimated by the Access Fund.</p> <p><u>How will the BLM know that the limitations are successful?</u> The Utah Division of Wildlife Resources studies bighorn numbers and distribution on an on-going basis. The Division shares its information with the BLM and success of the limitations vis-à-vis bighorn can be ascertained. The Raptor Inventory Nesting Survey is very active in the area in question and provides reports to the BLM on nesting success, numbers of nests and other metrics that can be used to gauge success of the limitations. In addition, the BLM monitors the Mexican spotted owl directly; continued success of this species is carefully tracked by U.S. Fish and Wildlife Service under the Endangered Species Act.</p>
Access Fund et al.	The Access Fund suggest that limitations be tested first on highliners before limiting traditional climbers.	There are five known highlining areas in the area. Three of them were excluded from the restrictions; two areas remain and will be restricted on a year-round basis. No provision for seasonal highlining use is provided in the Decision.
Access Fund et al.	Reiterates that grazing causes more impact than recreation.	Grazing in the two canyons in question has been restricted in the past. In addition, cattle do not utilize the most important habitat in the canyons, which are the talus slopes, nesting sites, inaccessible cliffs, steep walled canyons, slot canyons, and alcoves; therefore, grazing decisions are not within the scope of this EA.

Access Fund et al.	The Access Fund does not support the No Action Alternative because it would not ensure the long term health and survival of the targeted wildlife species.	The BLM appreciates the Access Fund's concern for the long-term health and survival of the targeted species.
Access Fund et al.	The Access Fund proposes a plan similar to Alternative B, but without spatial limitations restricting climbing access to only three locations (Witch et al/Kachina Towers/Gollum). The permits should provide access throughout the Mineral-Hell Roaring planning area, and be issued through email or on-line. The BLM could issue special limitations if the intended destination of the climber is too sensitive. Access to these climbs should be allowed from the canyon floor if hikers are to remain unrestricted. The numbers proposed in Alternative B (35 permits/4 individuals per permit) are sufficient, as we estimate fewer than 50 climbers in these canyons annually	The purpose and need of the proposal is to limit the growth of recreational activities in these canyons. For that reason, the permit system will cover only the known and well-established climbs, which are the Witch, the Warlock, the Cauldron, the Gollum and the Kachina Towers. For the reasons stated above, access to the climbs will be from the rim. The permit will be issued by email, although initially, a phone call may be required to request the permit; the permit system will eventually be moved to an on-line platform.
Cox	I am the RINS monitor for the raptor nests in the Mineral and Hell Roaring Canyons and have spent 40-50 days per year in this location. I have observed an increase in slacklining, highlining, basejumping and drone use. I have seen anchors installed near raptor nests or near remote portions of the canyons frequented by bighorn sheep.	Thank you for your input and observations. These help the Moab Field Office assess current habitat conditions.
Cox	These two canyons are unique and are highly desirable to bighorn, Mexican Spotted Owls, Golden Eagles and other raptors. This habitat is unique and represents the best available within the field office. Many	The BLM agrees with your assessment of the importance of Mineral and Hell Roaring Canyons.

	other canyons in the MFO do not support this level of habitation, probably due to their proximity to roads.	
Cox	Supports Alternative A as the best level of protection for these species; the 10,000 acre area is a small portion of the 1.8 million acres managed by the MFO. Excluded areas still allow for recreation opportunities in the immediate area, as well as the recreation opportunities provided in the millions of acres of public lands surrounding the target area. The research presented in the EA supports the choice of Alternative A.	The BLM is a multiple use agency and strives to balance natural resources and human uses. Alternative B was deemed to provide limited and seasonal access to a known recreation resource while providing protection to the targeted species. Access will occur only in non-crucial seasons, in limited numbers and by permit.
Cox	Unpredictable activities have greater impact on wildlife and raptors, as they trigger a flight response and increase stress. The longer a human activity lasts, the greater the stress. Highlining and climbing are all day activities (rigging etc) and increase stress on wildlife and raptors.	Limiting the climbing permit numbers, access and season to only six locations will limit the unpredictable activity occurring in these two canyons. Climbing access will be from the rim, limiting the time in the habitat and thus limiting the stress. Highlining will not be available seasonally for many of the reasons that you cite.
Cox	Activities proximate to raptor nests cause stress to adults and their young. Nesting success and productivity is lessened.	The decision will disallow roped and aerial activities throughout the canyon system. Minimal (35 permits) in six specific climbing locations with specific access routes would be permitted only during non-nesting seasons through a managed permitting system.
Cox	Recreation use has increased and it is logical to assume that this trend will continue. There would be “significant benefit for wildlife and raptors by taking action now as outlined in Alternative A”. People can move to other areas to enjoy recreation; wildlife cannot move easily to other areas, especially to less-desirable	The permit system seeks to manage that use at present levels for the benefit of the species, thus mitigating increases in recreational use in the area.

	habitat, without negative impacts.”	
Ferrara	The problem for wildlife are the activities of slackliners, basejumpers and highliners. The plan should discontinue these activities. Climbers should be excluded from the proposal, as they seek solitude and quiet.	Although the activities are different, climbers do use the same inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes and have thus been included in the proposal. The decision allows for continued seasonal use of the six classic backcountry climbs in Hell Roaring Canyon.
Hill	I fully support Alternative A. Recreationists are increasing in number and seek to go where “no one has gone before”. This has increased disturbance to our vulnerable and endangered wildlife. The BLM’s 2016 Master Leasing Plan provides protection of native bighorn sheep as one of the last remaining Utah native herds. This protection should be extended by restricting impactful human activity. There are many other places for these recreationists to enjoy their activity.	The BLM is a multiple use agency and seeks to balance protection of resources with human use. By choosing Alternative B, access to six classic climbs would be allowed only seasonally and in limited numbers. The intent of both action alternatives is to staunch the growth of such activities into these two canyons.
Hill	Further restrictions on motorized vehicles are needed to protect habitat.	Restrictions on motorized vehicles are being considered in the Travel Management Plan that is under analysis for the Labyrinth Canyons/Gemini Bridges Travel Management Area. Motorized management decisions are not in the scope of this EA; vehicles currently are restricted to designated routes, and vehicles cannot access the inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes so important to the species in question.
Jasper	The proposal does not enhance recreational access. If the habitat is so important, why was it not made an ACEC in the 2008 RMP? Why does the EA focus on aerial recreational activities when other recreational activities,	<p>The proposed management prescription is designed to proactively secure sensitive, listed and important wildlife habitats.</p> <p>The 2008 RMP and the 2016 Master Leasing Plan placed multiple management prescriptions to facilitate wildlife protection</p>

	<p>ranching or mineral activities have more impacts?</p>	<p>in Mineral and Hell Roaring canyons. The RMP also provides the sideboards for recreation management to proactively protect special status species and wildlife habitat (See page 8 and 9 of this document).</p> <p>The scope of this EA as defined by the ‘<i>propose & need</i>’, and identifies activities that ‘<i>access into these limited remaining escape terrains and nesting sites</i>’ that consist of otherwise ‘<i>inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes</i>’ not accessible by other recreational activities that do not use ropes or aerial delivery. The EA details the restrictions that have already been placed on the activities that you mention: vehicles are restricted to designated routes, cattle grazing has been restricted and surface-disturbing mineral activities are disallowed in the area under the terms of the Moab RMP and the Moab Master Leasing Plan. The Decision to choose Alternative B allows continued access to the six classic climbs in Hell Roaring Canyon.</p>
Jasper	<p>The Fruit Bowl is the best highlining location in the world.</p>	<p>The Fruit Bowl is not under consideration for restriction in any of the action alternatives.</p>
Jasper	<p>Highlining, canyoneering and climbing are predictable and consistent. They are very social activities and are concentrated in a small number of suitable locations. The BLM should “contact these groups and manage their use through permitted use. Implementing permits would allow for these groups to occasionally use some of the areas threatened by closure while balancing the needs of sensitive species.”</p>	<p>The most popular highlining areas, where the most predictable and consistent use occurs, have been excluded from the proposal and the activity would still be allowed in those locations. Permits will be implemented for the six classic climbs in Hell Roaring Canyon, thus allowing access for climbers to occasionally use some of the area while balancing the needs of sensitive species. There were no canyoneering areas identified during scoping.</p>

Kaufmann	I recreate in the Mineral/Hell Roaring area. I do not understand why there is a need to limit recreational activities on BLM lands and strongly disagree with the EA.	The ‘ <i>purpose and need</i> ’ section identifies the need of the proposal. Mineral and Hell Roaring Canyons have been identified as important habitat for numerous species. Chapter Three identifies existing conditions relevant to identified issues and discloses the potential direct, indirect and cumulative impacts of the action and no action alternatives.
McKay	I am a drone enthusiast and strongly oppose any restrictions on drones in the Mineral and Hell Roaring area. The BLM admitted in the EA that there is no scientific study on the impacts of drones specifically, but asserts that impacts are similar to ground based activities. Flying drones “has little resemblance to these activities... drones would logically have very different impacts.”	<p>The EA addresses aerial delivery and assumes that drones are a form of aerial delivery.</p> <p>Alternatives were developed to “<i>find a balance between recreational uses that access otherwise inaccessible portions of crucial wildlife habitat</i>” as noted in the Purpose and Need Section. The EA provides analysis assumptions that cite peer reviewed and scientific research documents outlining how human disturbance results in negative alteration in ungulate and raptor behavior and energetics. Low flying drone use or drone use close to nesting areas does have the potential to elicit behavioral responses as described in Chapter Three.</p>
McKay	The BLM has no idea what the impact of drones is on bighorn sheep because it has done no scientific studies to find out.	<p>The BLM acknowledges that there have been no studies conducted in the area on the impact of drones specifically.</p> <p>As noted above, The EA provides analysis assumptions that cite peer reviewed and scientific research documents outlining how human disturbance results in alteration in ungulate and raptor behavior and energetic. Low flying drone use or drone use close to nesting areas from above does have the potential to elicit negative behavior responses as described in Chapter Three.</p>
McKay	There is also no study of drones on raptors, although it is logical to assume that drones might have an impact on birds because they	The impact of drones on raptors is not fully understood. Bighorn reside in this area year-round and raptors may also use the area during the non-nesting season The purpose

	share the same airspace. But these impacts do not justify year round restrictions on drone operation.	and need of the EA is to prevent the continued expansion of recreational activity into an area identified as important habitat.
. McKay	There are no cited studies on drone use and this does not meet the “hard look” standard of NEPA. The BLM cannot ban drones “just in case” they have negative impacts on wildlife. I strongly oppose any restrictions on drone flying.	NEPA directs agencies began to take a ‘hard look’ at environmental consequences. If the impacts of a project are uncertain or information is lacking, courts have upheld an agency’s NEPA analysis so long as the agency considers potential impacts based on available information from other studies. Even though the actual direct effects of drones on bighorn, eagles, raptors and owls in this area may be uncertain at this time, peer reviewed and scientific research clearly documents behavioral and energetic responses of ungulate and raptor species to unpredicted human activity. The Moab BLM took the requisite ‘hard look’ because it considered the potential impacts of unpredictable human disturbances in these critical habitats as defined by the EA analysis assumptions. Drone use clearly is an ‘unpredictable’ human activity that is preformed through ‘aerial delivery’.
McKay	The BLM cannot enforce this prohibition, because the drone could just be launched from outside the restricted area. The proposed restrictions would be “utterly ineffective” at achieving reductions in impacts on wildlife.	The BLM acknowledges that the drone can be launched from outside the restricted area. However, this in itself could be beneficial, because the drone launching would most probably occur at a sufficient distance from a nest or from important bighorn habitat.
McKay	If filming activities decrease due to the proposal, drone use will naturally decrease. There is therefore no need for a separate restriction prohibiting drones, as most of the existing impacts of drones are linked to other activities that will already be prohibited.	As noted above, the scop of this EA identifies roped and aerial activities that access otherwise inaccessible habitats. Filming permits are not within the scope of this EA.
McKay	If one can legally drive a road (such as the long road up Hell Roaring Canyon), one should be	The Hell Roaring Road is under analysis as part of the Labyrinth Rims/Gemini Bridges Travel Management Plan, which is ongoing. As noted above, drones have the ability to

	able to operate a drone along that same road.	that access otherwise inaccessible portions of crucial wildlife habitat, potentially eliciting behavior responses as described in Chapter Three.
McKay	For the above reasons, the proposed restrictions on drones are scientifically unjustified, irrational, ineffective and arbitrary and capricious. I urge the BLM to adopt Alternative C with respect to drones and to remove all proposed restrictions on drone operations from the final rule adopted as a result of this EA.	The restriction is for all aerial delivery. Since drones can be launched from outside the area and flown legally over the area, the BLM sees no reason to exclude drones from launching in the most sensitive wildlife habitats. As noted above drones have the ability to access otherwise inaccessible portions of crucial wildlife habitat.
Public Lands Policy Coordinating Office, Office of the Governor, State of Utah	The State of Utah supports Alternative A. This alternative allows, but also limits the expansion of roped and aerial activities. This alternative balances recreational activities with the greatest potential to impact wildlife in the highest valued habitats in the canyons.	The decision limits the expansion of roped and aerial activities, which meets the purpose and need of the proposal.
Raptor Inventory Nest Survey (MacDuff)	RINS supports Alternative A. We offer an example of the need for this proposal. In 2016, an active golden eagle nest was identified along the edge of Mineral Canyon. A golden eagle chick was present in the nest, but the adult eagles abandoned the nest and the chick died. The assumption is that the nearby recreation activity caused this abandonment.	By choosing Alternative B, the BLM will allow limited seasonal access to six classic climbs; all other roped and aerial recreational activities would be disallowed throughout the two canyons.
Raptor Inventory Nest Survey (MacDuff)	Alternative B proposes seasonal access. However, the raptors in these canyons are not seasonal. They do not migrate; the raptors establish territories which can then be lost due to human disruption, resulting in no nesting and no birds. The restriction proposed in Alternative A is a	The seasonal access would be allowed only under a limited permit system. Approach to the climbs would be from the rim, limiting the amount of time that humans would be in the raptor territory and ensuring predictable access routes to climbs.

	modest area compared to the thousands of acres available for roped and aerial activities in the Moab FO.	
Slackline US	Slackline US requests that seasonal highlining permits be added to Alternative B for the Highlands Bowl and the Colorado Bowl. Permanent closure of these two areas would eliminate a significant portion of the good highlining in the area.	<p>Five highlining areas were requested during scoping, and two were excluded from the proposed area (in addition to the Fruit Bowl). The Highlands Bowl and the Colorado Bowl remain in the restricted area due to the sensitive location of year round wildlife use in these two areas.</p> <p>As noted in the Analysis Assumptions and in the Recreation Section found in Chapter Three of the EA, there is, at a minimum, over 225,700 acres of canyon and red rock formations within the Moab Field Office that provide the rock formations where various roped and aerial type activities may occur. The loss of two slackline areas is not expected to eliminate a significant portion of the good highlining in the Moab Field Office.</p>
Sternberg	Please limit aerial and roped activities in these canyons to protect wildlife.	Aerial and roped activities would be limited with the decision.
SUWA	SUWA supports the proactive management steps being considered by the BLM to mitigate human caused disturbances to sensitive wildlife species and their important and irreplaceable habitat. Recreation in the Moab area will continue to expand and interfere with wildlife habitat. It is prudent of the BLM to address these conflicts proactively.	The intent of the proposed action is to proactively limit the expansion of roped and aerial activities into a very important wildlife habitat, containing multiple species.
SUWA	SUWA urges the BLM to consider restricting motorized use within the proposed area. Although the BLM states that it is evaluating motorized use during the travel planning process, the	Motorized use, as stated above, is not within the scope of this document. Restrictions on motorized vehicles are under analysis in the Travel Management Plan that is ongoing for the Labyrinth Canyons/Gemini Bridges Travel Management Area. In addition,

	BLM should consider restricting motorized use now.	vehicles currently are restricted to designated routes, and vehicles cannot access the inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes so important to the species in question.
SUWA	SUWA supports disallowing roped and aerial activities in Mineral and Hell Roaring canyons. These recreationists have countless other places on public lands where the activities are widely available.	Aerial and roped activities would be disallowed throughout the canyons, although access to six classic climbs will be facilitated through a limited, seasonal permit system.
Tallman	I support the comments of the Access Fund. I wish to add that traditional backcountry rock climbing is a low impact recreational use and is far less impactful than hiking, motorized use and rope swinging, slacklining, BASE jumping etc.	<p>Traditional backcountry rock climbing though perhaps a low impact recreational use, does occur in otherwise <i>‘inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes’</i> and, as noted in Chapter One, recreational activities are rapidly increasing; the <i>‘need’</i> of this EA is to secure the continued use of important wildlife habitats by developing limitations on recreation activities likely to compromise these habitats. Thus, choosing Alternative B would allow for seasonal access to the six classic backcountry climbs identified in Hell Roaring Canyon while stemming new recreational uses of the targeted area.</p> <p>Restrictions on motorized vehicles are under analysis in the Travel Management Plan that is ongoing for the Labyrinth Canyons/Gemini Bridges Travel Management Area. In addition, vehicles currently are restricted to designated routes, and vehicles cannot access the inaccessible cliffs, steep walled canyons, slot canyons, alcoves and talus slopes so important to the species in question.</p> <p>Hikers are very limited in number and do not typically access the talus slopes and inaccessible cliffs that are involved with roped and aerial activities.</p>

Tallman	Backcountry rock climbers seek solitude and an unfettered wild experience. The true impacts on sheep and raptors are “squarely at the feet of the slackliners with their rave parties and high impact gatherings, and the vastly impactful off-road vehicles users and the many more hikers in the area annually.”	Backcountry rock climbers seeking solitude have the potential to impact ‘ <i>escape terrains and nesting sites</i> ’ not accessible by other recreational activities that do not use ropes or aerial delivery. Wildlife, as noted in the analysis, elicit negative response to the presence of humans and the perceived predator threat. However, the backcountry experience offered by climbing the six climbs in Hell Roaring Canyon would remain available under the chosen alternative.
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Appendix E

Outline of Permit System for Six Climbs in Hell Roaring Canyon

While roped and aerial activities are disallowed throughout the remainder of Mineral and Hell Roaring canyons, the Moab BLM will issue a limited number of seasonal permits so that climbers may continue to access the six classic climbs that are within Hell Roaring Canyon. Numbers have been set to accommodate current use levels.

No camping is available within the permit area; any overnight camping must occur in allowable locations outside the permit area.

- Up to 35 permits per year (with up to 4 people per permit) will be issued for the six specific climbs (in total). No more than 10 of these 35 permits will be issued for the Witch/Warlock/Cauldron group.
- Permits will be issued to both private and commercial climbers; no one person (or outfitter) may hold more than two permits in Hell Roaring Canyon per season.
- The climbs will be approached from the rims above the climbs. Those climbers permitted for the Gollum or the Witch/Warlock/Cauldron must use the south rim of Hell Roaring Canyon.
- No more than one permit per day will be issued for any of the climbs.
- No permits will be issued for any other locations within Hell Roaring or Mineral canyons.

Permit Limitations by Climb

Kachina Towers -North and South: Permits will be issued from September 1 – December 31 (that is, no permits would be issued from January 1 – August 31). The permit allows climbing one or both of the towers.

Gollum: Permits will be issued from September 1 – October 15 and from December 15 – December 31 (that is, no permits would be issued from January 1 – August 31 and from October 15 – December 15).

Witch/Warlock/Cauldron: : No more than 10 of the 35 available permits will be issued. Permits will be issued from September 1 – October 15 and from December 15 – December 31 (that is, no permits from January 1 – August 31 and from October 15 – December 15). The permit could be used to climb any or all of the three climbs in this group.

Permit Mechanics

Initially, the permit would be issued by contacting the Moab Field Office by phone; the permit would be emailed to the permit holder. The Field Office may seek to set up an on-line system of permit issuance in the future.

- The permit must be in possession of the permit holder during the climbing trip.
- The permit could be requested up to six months in advance
- The permit must be requested at least 48 hours in advance of the trip
- No permits will be issued on weekends or Federal holidays

United States Department of the Interior Bureau of Land Management

Finding of No Significant Impact/Decision Record

DOI-BLM-UT-Y010-2020-0068

November 2020

Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons

Location: Grand County, Utah

Proponent: Moab Field Office, Bureau of Land Management

Moab Field Office
82 East Dogwood
Moab, UT 84532
435-259-2100
435-259-2106



FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-UT-Y010-2020-0068

INTRODUCTION:

The Bureau of Land Management (BLM) has conducted an environmental analysis (EA), DOI-BLM-UT-Y010-2020-0068, to examine the environmental impacts of limiting roped and aerial activities in two canyons that contain important wildlife habitat for a variety of species. The lands proposed for limitation include 10,044 acres comprising the canyon walls and bottoms of Mineral and Hell Roaring Canyons, as well as the immediate rims of these canyons. These lands are located in the Labyrinth Rims/Gemini Bridges Special Recreation Management Area (SRMA), as well as in prime nesting habitat for raptors, including golden eagles and the Mexican spotted owl, a federally listed species under the Endangered Species Act, as well as prime lambing, rutting and year-round habitat for Utah's only native desert bighorn sheep herd. An active Mexican spotted owl nest is located within the project area, as well as over 70 additional eagle and raptor nests.

The project is described in the EA referenced above. The underlying need for the proposal (proactively secure the continued use of crucial wildlife habitats) would be met while providing limited seasonal access to known climbing locations within the project area. The EA (DOI-BLM-UT-Y010-2020-0068) is attached and is incorporated by reference for this Finding of No Significant Impact (FONSI). A No Action alternative and two action alternatives were analyzed in the EA. Alternative A would have disallowed roped and aerial activities in the entire area. The chosen alternative, Alternative B, will maintain limited seasonal climbing access to six known classic climbs in Hell Roaring Canyon by means of a permit system while providing protection to the crucial habitats of the affected species.

FINDING OF NO SIGNIFICANT IMPACT

Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27 and do not exceed those effects described in the 2008 Moab RMP/FEIS. Therefore, an environmental impact statement is not needed.

This finding is based on the context and intensity of the project as described:

Context: The project is a site-specific action directly involving approximately 10,004 acres on BLM land that by itself does not have international, national, regional, or state-wide importance.

Intensity: The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1) and supplemental Instruction Memorandum, Acts, regulations and Executive Orders.

The following have been considered in evaluating intensity for this proposal:

1. **Impacts may be both beneficial and adverse.** The selected alternative would impact wildlife resources beneficially as described in the EA. None of the environmental effects discussed in detail in the EA are considered significant, nor do the effects exceed those

described in the 2008 Moab RMP/FEIS. Impacts to recreation users are also analyzed within the EA.

2. **The degree to which the selected alternative will affect public health or safety.** The selected alternative would not affect public health or safety.
3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.** The historic and cultural resources of the area would not be negatively affected by the selected alternative.

The following components of the Human Environment and Resource Issues are not affected because they are not present in the project area: Areas of Critical Environmental Concern, BLM Natural Areas, Wilderness/Wilderness Study Area,.

In addition, the following components of the Human Environment and Resource Issues, although present, would not be affected by the selected alternative for the reasons listed in Appendix A of the EA: Air Quality, Floodplains, Soils, Water Resources, Wetlands, Invasive Species, Lands with Wilderness Characteristics, Visual Resources, Utah BLM Sensitive Species Wild and Scenic Rivers, Wastes, Threatened, Endangered or Candidate Plant Species, Cultural Resources, Native American Religious Concerns, Livestock Grazing, Woodlands, Geology, Environmental Justice, Lands/Access, Rangeland Health Standards, and Socioeconomics.

Four resources (Recreation, Threatened and Endangered Animal Species, Migratory Birds, and Fish and Wildlife) are analyzed in the EA. The selected alternative would have beneficial impacts upon the wildlife resources while still maintaining seasonal access to six classic climbs that are within the study area.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** There is no scientific controversy over the nature of the impacts.
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The project is not unique or unusual. The BLM has experience implementing restrictions on recreation in similar areas. The environmental effects to the human environment are fully analyzed in the EA. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.
6. **The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** The actions considered in the selected alternative were considered by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not predicted. A complete analysis of the direct, indirect, and cumulative effects of the selected alternative and all other alternatives is described in Chapter 3 of the EA.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership.** The interdisciplinary team evaluated the possible actions in context of past,

present and reasonably foreseeable actions. Significant cumulative effects are not predicted. A complete disclosure of the effects of the project is contained in Chapter 3 of the EA.

8. **The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** The project will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources.
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, or the degree to which the action may adversely affect: 1) a proposed to be listed endangered or threatened species or its habitat, or 2) a species on BLM's sensitive species list.** The goal of the selected alternative is to beneficially affect the Mexican Spotted Owl and its critical habitat.
10. **Whether the action threatens a violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements.** The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment.

Nicollee Gaddis-Wyatt, Moab Field Manager

Date

DECISION RECORD

DOI BLM UT Y010 2020-0068 EA

The Bureau of Land Management (BLM) has conducted an environmental analysis (EA), DOI-BLM-UT-Y010-2020-0068, to restrict roped and aerial activities in Mineral and Hell Roaring canyons (10,044 acres). Three alternatives were analyzed for their environmental impacts: Alternative A (no roped and aerial activities within the study area), Alternative B (limited seasonal access to six known climbs allowed) and No Action.

It is my decision to approve Alternative B, which authorizes the BLM to limit aerial and roped activities, as well as the construction or installation of temporary or overnight structures, in along the walls and rims of Mineral and Hell Roaring Canyons, as well as along the canyon walls and rims along the Green River corridor connecting these two canyons. This limitation would be applicable year round. However, a permit system will be established for six climbs in Hell Roaring Canyon (Witch/Warlock/Cauldron, Gollum and Kachina Towers North and South) allowing seasonal access to these known recreational assets. (See Appendix E of the EA for details related to the permit system).

The restricted area excludes the Mineral Bottom BASEjumping Focus Area as defined in the 2008 Moab Resource Management Plan (RMP), the Mineral Bottom Airstrip as defined in ROW #UTU-79987, Corner Tower, and the Fruit Bowl, Waterslide and Green River Highlining Areas. The area of limitation totals 10,044 acres, which represents less than 0.5% of the field office area.

Roped activities are those involving ropes, cables, Vectran, climbing aids, webbing or anchors. Roped activities include, but are not limited to: ziplining, space-netting, high-lining, slacklining, climbing, rappelling and rope swinging. Aerial activities are those which involve air delivery of a person or object from or to BLM land, including but not limited to BASEjumping, skydiving, vaulting, catapulting, paragliding, parachuting and other forms of aerial delivery, including drones. Following any decision to limit activities.

The BLM will pursue establishment of supplementary rules in accordance with 43 CFR 8365.1-6.

The EA is attached to this Decision Record.

Authorities: The authority for this decision is in CFR 43 8360 – Visitor Services.

Compliance and Monitoring: No monitoring is required. There are no special terms/conditions or stipulations.

PLAN CONFORMANCE AND CONSISTENCY:

The selected alternative has been reviewed and found to be in conformance with the 2008 Moab Resource Management Plan (RMP). The following decisions from that RMP supporting the selected alternative are:

REC-2 (page 81): Where unacceptable damage to natural or cultural resources by recreational use is anticipated or observed, BLM will seek to limit or control activities by managing the nature and extent of the activity or by providing site improvements that make the activity more sustainable or

by a combination of management controls and facility development. Such management actions will seek to reduce or eliminate the adverse impact while maintaining the economic benefits associated with a wide range of recreation uses.

REC-3 (page 81): BLM will consider and, where appropriate, implement management methods to protect riparian resources, special status species, and wildlife habitat while enhancing recreation opportunities. Management methods may include limitation of visitor numbers, camping and travel controls, implementation of fees, alteration of when use takes place, and other similar actions to be approved through normal BLM procedures.

SSS-3 (page 117): As required by the Endangered Species Act, no management action will be permitted on public lands that will jeopardize the continued existence of plant or animal species that are listed or are officially proposed or are candidates for listing as T and E.

SSS-20 (page 120): Mexican Spotted Owl lists five actions that would be taken to protect this species. These actions include “monitor and protect known Protected Activity Center (PAC) sites according to USFWS recommendations and MSO Recovery Plan”, and manage habitat for MSO according to USFWS and UDWR recommendations and recovery plans.

SSS-29 (page 123): Golden Eagle lists four actions that will be undertaken to protect this species, including the protection of golden eagle nest and habitat.

WL-1 (pag136): Continue to implement and modify three Habitat Management Plans (HMPs) summarized in Appendix U: Hatch Point HMP, Dolores Triangle HMP and the Potash-Confluence HMP.

WL-18 (page 138) Raptors will be managed under the auspices of Best Management Practices (BMPs; see Appendix R), which will include implementation of spatial and seasonal buffers. These BMPs implement the USFWS's Guidelines for Raptor Protection from Human and Land-use Disturbances, with modifications allowed as long as protection of nests is ensured. Seasonal and spatial buffers are also listed in Appendix R. Cooperate with utility companies to prevent electrocution of raptors. Temporarily close areas (amount of time depends on the species) near raptor nests to rock climbers or other activities if the activity could result in nest abandonment.

WL-36 (page 141): **Bighorn Sheep Habitat:** To protect lambing, rutting, and migration habitat (101,897 acres), apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface disturbing activities (see Appendix A).

WL-37 (page 142): **Bighorn Sheep Habitat:** Manage lambing areas with the following prescriptions: camping is allowed only in designated campsites.

Appendix A (page A19): In Desert Bighorn Sheep Lambing Grounds and Migration Corridors (101,897 acres), no surface disturbing activities are allowed. (*Note: this stipulation applies to all surface disturbing activities, not just to oil and gas – see introduction to Appendix A*).

The Moab Master Leasing Plan (2016) expanded the prohibition on surface disturbing activities from mineral operations in desert bighorn sheep habitat to 107,220 acres.

In addition, The Federal Land Policy and Management Act mandates multiple use of Public Lands, including recreation use and wildlife habitats.

The selected alternative is related to IM No. 2013-161 *Processing and Approving Supplementary Rules*: “The state director may establish supplementary rules to provide for the protection of persons, property, and public lands and resources. Supplementary rules are used to support objectives of 43 CFR Subpart 8365, “Rules of Conduct” for the protection of public lands and resources.

Rationale for Decision: The selected alternative meets the purpose and need for the project by limiting roped and aerial activities in an area of crucial importance to several wildlife species, including raptors (Golden Eagle and Mexican spotted owl) as well as Utah’s only native desert bighorn sheep herd. The purpose and need for the project is to limit the growth of the chosen activities further into the habitat areas. The locations currently utilized by roped and aerial recreationists are either excluded from the project area (Fruit Bowl, Waterslide, Green River Bowl and the BASEjumping Focus Area) or are restricted using a seasonal permit system (Witch/Warlock/Cauldron, Gollum, Kachina Towers North and South climbing crags). Thus the selected alternative allows for current use levels while limiting the growth of these activities further into the habitats.

The public was notified of the action by posting on the ePlanning website on April 7, 2020. A formal Scoping Period on the project was announced in a Press Release issued on May 29, 2020. The project was featured in a full-page newspaper story in the *Salt Lake Tribune* on June 18, 2020. The BLM received 222 scoping comments, which are summarized in Appendix B of the EA. A comment period was held on the EA from August 18 to September 21. The availability of the comment period was announced in a Press Release issued on August 19, 2020. The BLM received 13 comments on the EA. They are summarized in Appendix D of the EA.

Protest/Appeal Language:

The decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. Public notification of this decision will be considered to have occurred on the date that it is posed on ePlanning. Within 30 days of this decision, a notice of appeal must be filed in the office of the Authorized Officer at Moab Field Office, Bureau of Land Management, 82 East Dogwood, Moab, Utah 84532. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

If you wish to file a petition for stay pursuant to 43 CFR Part 4.21(b)), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant’s success on the merits,
3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and
4. Whether the public interest favors granting the stay.

If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the Authorized Officer.

A copy of the notice of appeal, any statement of reasons and all pertinent documents must be served on each adverse party named in the decision from which the appeal is taken and on the Office of the Regional Solicitor, U.S. Department of the Interior, 6201 Federal Building, 125 South State Street, Salt Lake City, Utah 84138-1180, not later than 15 days after filing the document with the Authorized Officer and/or IBLA.

Nicollee Gaddis-Wyatt, Moab Field Manager

Date

Attachments: EA # DOI-BLM-UT-Y010-2020-0068

United States Department of the Interior Bureau of Land Management

Finding of No Significant Impact/Decision Record

DOI-BLM-UT-Y010-2020-0068

June 2021

Limiting Roped and Aerial Activities in Mineral and Hell Roaring Canyons

Location: Grand County, Utah

Proponent: Moab Field Office, Bureau of Land Management

Moab Field Office
82 East Dogwood
Moab, UT 84532
435-259-2100
435-259-2106



FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-UT-Y010-2020-0068

INTRODUCTION:

The Bureau of Land Management (BLM) has conducted an environmental analysis (EA), DOI-BLM-UT-Y010-2020-0068, to examine the environmental impacts of limiting roped and aerial activities in two canyons that contain important wildlife habitat for a variety of species. The lands proposed for limitation include 10,044 acres comprising the canyon walls and bottoms of Mineral and Hell Roaring Canyons, as well as the immediate rims of these canyons. These lands are located in the Labyrinth Rims/Gemini Bridges Special Recreation Management Area (SRMA), as well as in prime nesting habitat for raptors, including golden eagles and the Mexican spotted owl, a federally listed species under the Endangered Species Act, as well as prime lambing, rutting and year-round habitat for Utah's only native desert bighorn sheep herd. An active Mexican spotted owl nest is located within the project area, as well as over 70 additional eagle and raptor nests.

The project is described in the EA referenced above. The underlying need for the proposal (proactively secure the continued use of crucial wildlife habitats) would be met while providing limited seasonal access to known climbing locations within the project area. The EA (DOI-BLM-UT-Y010-2020-0068) is attached and is incorporated by reference for this Finding of No Significant Impact (FONSI). A No Action alternative and two action alternatives were analyzed in the EA. Alternative A would have disallowed roped and aerial activities in the entire area. The chosen alternative, Alternative B, will maintain limited seasonal climbing access to some climbs within the project area by means of a permit system, while providing protection to the crucial habitats of the affected species.

FINDING OF NO SIGNIFICANT IMPACT

Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27 and do not exceed those effects described in the 2008 Moab RMP/FEIS. Therefore, an environmental impact statement is not needed.

This finding is based on the context and intensity of the project as described:

Context: The project is a site-specific action directly involving approximately 10,004 acres on BLM land that by itself does not have international, national, regional, or state-wide importance.

Intensity: The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1) and supplemental Instruction Memorandum, Acts, regulations and Executive Orders.

The following have been considered in evaluating intensity for this proposal:

1. **Impacts may be both beneficial and adverse.** The selected alternative would impact wildlife resources beneficially as described in the EA. None of the environmental effects discussed in detail in the EA are considered significant, nor do the effects exceed those

described in the 2008 Moab RMP/FEIS. Impacts to recreation users are also analyzed within the EA.

2. **The degree to which the selected alternative will affect public health or safety.** The selected alternative would not affect public health or safety.
3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.** The historic and cultural resources of the area would not be negatively affected by the selected alternative.

The following components of the Human Environment and Resource Issues are not affected because they are not present in the project area: Areas of Critical Environmental Concern, BLM Natural Areas, Wilderness/Wilderness Study Area

In addition, the following components of the Human Environment and Resource Issues, although present, would not be affected by the selected alternative for the reasons listed in Appendix A of the EA: Air Quality, Floodplains, Soils, Water Resources, Wetlands, Invasive Species, Lands with Wilderness Characteristics, Visual Resources, Utah BLM Sensitive Species Wild and Scenic Rivers, Wastes, Threatened, Endangered or Candidate Plant Species, Cultural Resources, Native American Religious Concerns, Livestock Grazing, Woodlands, Geology, Environmental Justice, Lands/Access, Rangeland Health Standards, and Socioeconomics.

Four resources (Recreation, Threatened and Endangered Animal Species, Migratory Birds, and Fish and Wildlife) are analyzed in the EA. The selected alternative would have beneficial impacts upon the wildlife resources while still maintaining seasonal access to climbs that are within the study area.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** There is no scientific controversy over the nature of the impacts.
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The project is not unique or unusual. The BLM has experience implementing restrictions on recreation in similar areas. The environmental effects to the human environment are fully analyzed in the EA. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.
6. **The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** The actions considered in the selected alternative were considered by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not predicted. A complete analysis of the direct, indirect, and cumulative effects of the selected alternative and all other alternatives is described in Chapter 3 of the EA.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership.** The interdisciplinary team evaluated the possible actions in context of past,

present and reasonably foreseeable actions. Significant cumulative effects are not predicted. A complete disclosure of the effects of the project is contained in Chapter 3 of the EA.

8. **The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** The project will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources.
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, or the degree to which the action may adversely affect: 1) a proposed to be listed endangered or threatened species or its habitat, or 2) a species on BLM's sensitive species list.** The goal of the selected alternative is to beneficially affect the Mexican Spotted Owl and its critical habitat.
10. **Whether the action threatens a violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements.** The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment.

Nicollee Gaddis-Wyatt, Moab Field Manager

Date

DECISION RECORD

DOI BLM UT Y010 2020-0068 EA

The Bureau of Land Management (BLM) has conducted an environmental analysis (EA), DOI-BLM-UT-Y010-2020-0068, to restrict roped and aerial activities in Mineral and Hell Roaring canyons (10,044 acres). Three alternatives were analyzed for their environmental impacts: Alternative A (no roped and aerial activities within the study area), Alternative B (limited seasonal access to climbs allowed) and No Action.

Background Information:

On November 24, 2020, the BLM signed a Decision Record for EA # DOI-BLM-UT-Y0101-2020-0068 (2020 Decision), which chose Alternative B:

It is my decision to approve Alternative B, which authorizes the BLM to limit aerial and roped activities, as well as the construction or installation of temporary or overnight structures, in along the walls and rims of Mineral and Hell Roaring Canyons, as well as along the canyon walls and rims along the Green River corridor connecting these two canyons. This limitation would be applicable year round. However, a permit system will be established for six climbs in Hell Roaring Canyon (Witch/Warlock/Cauldron, Gollum and Kachina Towers North and South) allowing seasonal access to these known recreational assets. (See Appendix E of the EA for details related to the permit system).

The restricted area excludes the Mineral Bottom BASEjumping Focus Area as defined in the 2008 Moab Resource Management Plan (RMP), the Mineral Bottom Airstrip as defined in ROW #UTU-79987, Corner Tower, and the Fruit Bowl, Waterslide and Green River Highlining Areas. The area of limitation totals 10,044 acres, which represents less than 0.5% of the field office area.

Roped activities are those involving ropes, cables, Vectran, climbing aids, webbing or anchors. Roped activities include, but are not limited to: ziplining, space-netting, high-lining, slacklining, climbing, rappelling and rope swinging. Aerial activities are those which involve air delivery of a person or object from or to BLM land, including but not limited to BASEjumping, skydiving, vaulting, catapulting, paragliding, parachuting and other forms of aerial delivery, including drones. (from 2020 Decision)

On December 17, 2020, several Climbing Organizations appealed the 2020 Decision to the Interior Board of Land Appeals (IBLA). Beginning in January 2021, the Climbing Organizations and the BLM discussed the Climbing Organizations' concerns with the 2020 Decision. As a result of these discussions, BLM filed an unopposed motion to vacate and remand the 2020 Decision on April 23, 2021. On May 12, 2021, the IBLA vacated the decision and remanded the matter back to BLM.

BLM is issuing a new decision concerning roped and aerial activities in Mineral and Hell Roaring Canyons.

Decision

It is my decision to approve a modification of Alternative B, which authorizes the BLM to limit aerial and roped activities, and the construction or installation of temporary or overnight structures, in and along the walls and rims of Mineral and Hell Roaring Canyons, as well as along the canyon walls and rims along the Green River corridor connecting these two canyons. This limitation would be applicable year-round. However, a seasonal permit system will be established to allow for climbing within the two areas listed below:

- 1) Lower Hell Roaring Canyon, lower Mineral Canyon, and along the Green River between the two canyons (3,934 acres --shown as the "Green Zone" on the map in Appendix A). The exact location of the permit will not be specified; the permit allows the holder to climb anywhere in the Green Zone.
- 2) Upper Hell Roaring Canyon (4,272.4 acres – shown as the "Purple Zone" on the map); seasonal permits will be available for six specific towers only: the Witch/Warlock/Cauldron towers, the Gollum tower and the Kachina Towers North and South.

The upper portion of Mineral Canyon (1,537.4 acres shown as the "Red Zone" on the map) is completely restricted to all climbing. In addition, there will be no climbing within one-quarter mile around the bighorn sheep guzzlers as shown on the map in Appendix A and no climbing in Upper Hell Roaring Canyon apart from the six towers identified above.

Up to 35 climbing permits (with four people per permit) will be issued within the Purple and Green Zones. These permits are not available for aerial recreation. See Appendix B for details of the specific terms of the seasonal permit system. The permit system will begin when the supplemental rule is finalized.

The restricted area excludes the Mineral Bottom BASEjumping Focus Area as defined in the 2008 Moab Resource Management Plan (RMP), the Mineral Bottom Airstrip as defined in ROW #UTU-79987, Corner Tower, and the Fruit Bowl, Waterslide and Green River Highlining Areas (the highlining areas identified by Slackline US). The area of limitation totals 10,044 acres, which represents less than 0.5% of the field office area.

Roped activities are those involving ropes, cables, Vectran, climbing aids, webbing or anchors. Roped activities include, but are not limited to: ziplining, space-netting, high-lining, slacklining, climbing, rappelling and rope swinging. Aerial activities are those which involve air delivery of a person or object from or to BLM land, including but not limited to BASEjumping, skydiving, vaulting, catapulting, paragliding, parachuting and other forms of aerial delivery, including drones.

Following any decision to limit activities, the BLM will pursue establishment of supplementary rules in accordance with 43 CFR 8365.1-6.

Authorities: The authority for this decision is in CFR 43 8360 – Visitor Services.

Compliance and Monitoring: No monitoring is required. There are no special terms/conditions or stipulations.

PLAN CONFORMANCE AND CONSISTENCY:

The decision has been reviewed and found to be in conformance with the 2008 Moab Resource Management Plan (RMP). The following decisions from that RMP supporting the selected alternative are:

REC-2 (page 81): Where unacceptable damage to natural or cultural resources by recreational use is anticipated or observed, BLM will seek to limit or control activities by managing the nature and extent of the activity or by providing site improvements that make the activity more sustainable or by a combination of management controls and facility development. Such management actions will seek to reduce or eliminate the adverse impact while maintaining the economic benefits associated with a wide range of recreation uses.

REC-3 (page 81): BLM will consider and, where appropriate, implement management methods to protect riparian resources, special status species, and wildlife habitat while enhancing recreation opportunities. Management methods may include limitation of visitor numbers, camping and travel controls, implementation of fees, alteration of when use takes place, and other similar actions to be approved through normal BLM procedures.

SSS-3 (page 117): As required by the Endangered Species Act, no management action will be permitted on public lands that will jeopardize the continued existence of plant or animal species that are listed or are officially proposed or are candidates for listing as T and E.

SSS-20 (page 120): Mexican Spotted Owl lists five actions that would be taken to protect this species. These actions include “monitor and protect known Protected Activity Center (PAC) sites according to USFWS recommendations and MSO Recovery Plan,” and manage habitat for MSO according to USFWS and UDWR recommendations and recovery plans.

SSS-29 (page 123): Golden Eagle lists four actions that will be undertaken to protect this species, including the protection of golden eagle nest and habitat.

WL-1 (page 136): Continue to implement and modify three Habitat Management Plans (HMPs) summarized in Appendix U: Hatch Point HMP, Dolores Triangle HMP and the Potash-Confluence HMP.

WL-18 (page 138) Raptors will be managed under the auspices of Best Management Practices (BMPs; see Appendix R), which will include implementation of spatial and seasonal buffers. These BMPs implement the USFWS's Guidelines for Raptor Protection from Human and Land-use Disturbances, with modifications allowed as long as protection of nests is ensured. Seasonal and spatial buffers are also listed in Appendix R. Cooperate with utility companies to prevent electrocution of raptors. Temporarily close areas (amount of time depends on the species) near raptor nests to rock climbers or other activities if the activity could result in nest abandonment.

WL-36 (page 141): **Bighorn Sheep Habitat:** To protect lambing, rutting, and migration habitat (101,897 acres), apply a no surface occupancy stipulation for oil and gas leasing and preclude other surface disturbing activities (see Appendix A).

WL-37 (page 142): **Bighorn Sheep Habitat:** Manage lambing areas with the following prescriptions: camping is allowed only in designated campsites.

Appendix A (page A19): In Desert Bighorn Sheep Lambing Grounds and Migration Corridors (101,897 acres), no surface disturbing activities are allowed. (*Note: this stipulation applies to all surface disturbing activities, not just to oil and gas – see introduction to Appendix A*).

The Moab Master Leasing Plan (2016) expanded the prohibition on surface disturbing activities from mineral operations in desert bighorn sheep habitat to 107,220 acres.

In addition, The Federal Land Policy and Management Act mandates multiple use of Public Lands, including recreation use and wildlife habitats.

The modified alternative is related to IM No. 2013-161 *Processing and Approving Supplementary Rules*: “The state director may establish supplementary rules to provide for the protection of persons, property, and public lands and resources. Supplementary rules are used to support objectives of 43 CFR Subpart 8365, “Rules of Conduct” for the protection of public lands and resources.

Rationale for Decision: The purpose and need for the project is to prevent the further growth of roped and aerial activities further into the most important wildlife habitats within the canyons. The amended decision meets the purpose and need for the project by limiting roped and aerial activities in an area of crucial importance to several wildlife species, including raptors (Golden Eagle and Mexican spotted owl) as well as Utah’s only native desert bighorn sheep herd. Although the amended decision seasonally allows climbing along the Green River (the ‘Green Zone’), human activity is not unexpected in this area. Under this amended decision, the more important wildlife habitats remain heavily protected from the impacts of roped activities.

The decision helps to mitigate the conflicts between human activity and wildlife. The decision limits those impacts to where they are already occurring but prevents the spread of the impacts to the most important habitat in the Upper Mineral and Upper Hell Roaring (as identified in the Map in Appendix A) of the canyons. While the current decision impacts recreation users, other BLM programs (oil and gas, grazing, motorized travel) have already been restricted in this area to benefit wildlife.

The locations currently utilized by roped and aerial recreationists are either excluded from the project area (Fruit Bowl, Waterslide, Green River Bowl and the BASEjumping Focus Area) or are restricted using a seasonal permit system (the lower portions of the Mineral and Hell Roaring canyons and the walls along the Green River, and the Witch/Warlock/Cauldron, Gollum, Kachina Towers North and South climbing towers in upper Hell Roaring Canyon). Thus, the modified alternative allows for current use levels to continue while limiting the growth of these activities further into the wildlife habitats in the Upper Mineral and Upper Hell Roaring of the canyons.

The public was notified of the action by posting on the ePlanning website on April 7, 2020. A formal Scoping Period for the project was announced in a Press Release issued on May 29, 2020. The project was featured in a full-page newspaper story in the *Salt Lake Tribune* on June 18, 2020. The BLM received 222 scoping comments, which are summarized in Appendix B of the EA. A comment period was held on the EA from August 18, 2020 to September 21, 2020. The availability of the comment period was announced in a Press Release issued on August 19, 2020. The BLM received 13 comments on the EA. Those comments are summarized in Appendix D of the EA.

Protest/Appeal Language:

The decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. Public notification of this decision will be considered to have occurred on the date that it is posted on ePlanning. Within 30 days of this decision, a notice of appeal must be filed in the office of the Authorized Officer at Moab Field Office, Bureau of Land Management, 82 East Dogwood, Moab, Utah 84532. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

If you wish to file a petition for stay pursuant to 43 CFR Part 4.21(b)), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and
4. Whether the public interest favors granting the stay.

If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the Authorized Officer.

A copy of the notice of appeal, any statement of reasons and all pertinent documents must be served on each adverse party named in the decision from which the appeal is taken and on the Office of the Regional Solicitor, U.S. Department of the Interior, 6201 Federal Building, 125 South State Street, Salt Lake City, Utah 84138-1180, not later than 15 days after filing the document with the Authorized Officer and/or IBLA.

Nicollee Gaddis-Wyatt, Moab Field Manager

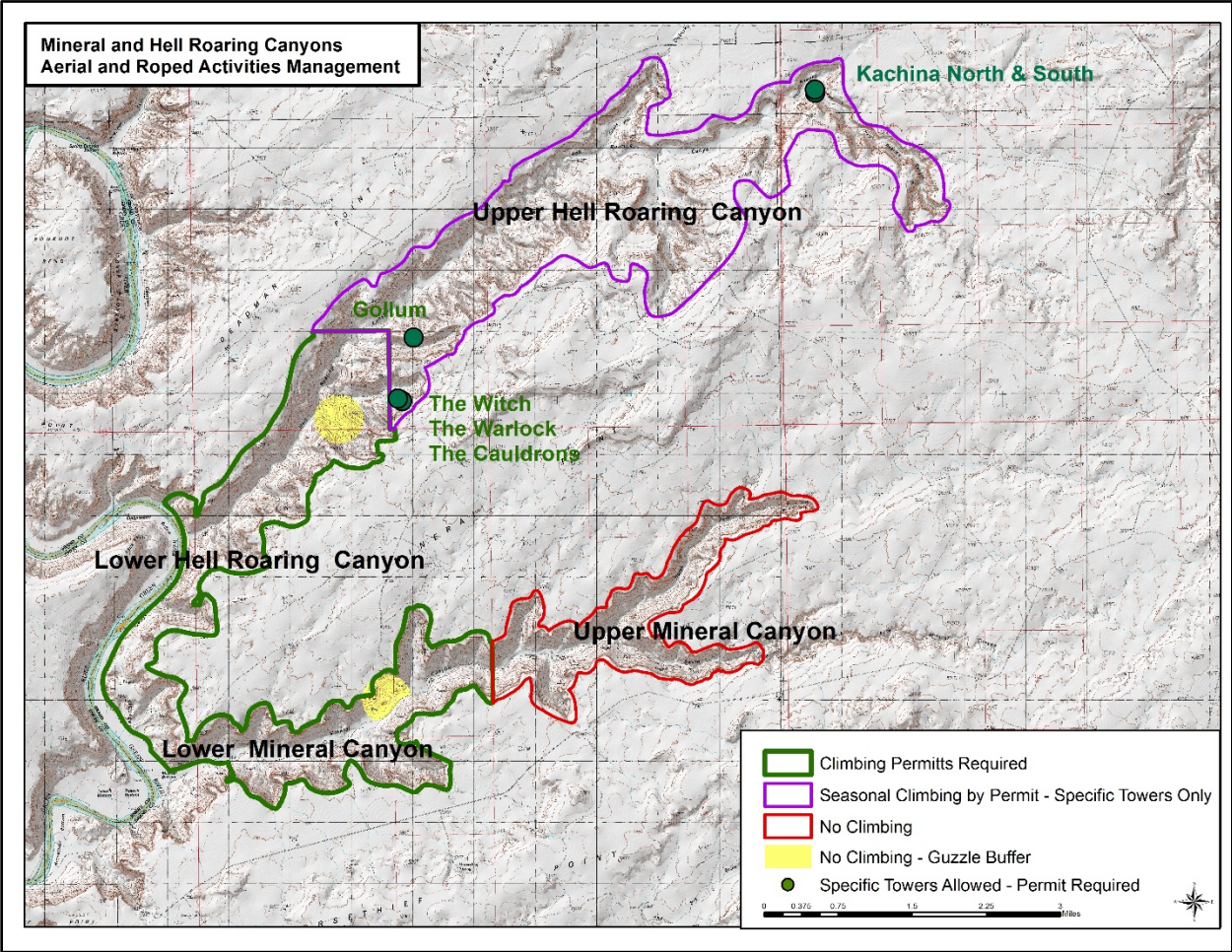
Date

Attachments: EA # DOI-BLM-UT-Y010-2020-0068

APPENDIX A: Map

APPENDIX B: Details of Permit System for Climbing

Appendix A: Map



Appendix B

Outline of Seasonal Climbing Permit System

The Moab BLM will issue a limited number of seasonal permits so that climbers may continue to access the lower portions of Mineral and Hell Roaring Canyons and the cliffs along the Green River (collectively known as the Green Zone), and six classic towers within upper Hell Roaring Canyon (the Purple Zone). Numbers of permits to be issued have been set to accommodate current use levels. The permit system will begin when the supplemental rule is finalized.

- Up to 35 seasonal permits per year (with up to 4 people per permit) will be issued to climbers; allowable areas include anywhere in the Green Zone and the six specific towers in upper Hell Roaring Canyon. Permits are not available for aerial recreation.
- Once 35 permits have been issued for the year, the permit process will be closed for that year.
- Within the Green Zone, climbers may choose locations anywhere within that zone (rather than specific climbs).
- Within the Purple Zone, climbers may only access six classic towers (Witch/Warlock/Cauldron, Gollum and Kachina Towers North and South).
- The towers in upper Hell Roaring Canyon (Purple Zone) will be approached from the rims above the tower. Those climbers permitted for the Gollum or the Witch/Warlock/Cauldron must use the south rim of Hell Roaring Canyon.
- The climbing locations in the Green Zone may be approached from either above or below.
- Commercial outfitters are limited to five of the 35 annual permits.
- No individual (or outfitter) may hold more than two permits per season; an individual who has used his/her allotted permits may join the party of another individual's valid permit.
- If there are unused permits at the end of the season (that is, in November or December of a given year), the BLM may consider allowing a climber who has otherwise reached the two-permit limit to apply for an additional permit.

Permit Limitations by Location

Kachina Towers -North and South:

- Permits will be issued from September 1 – December 31 (no permits will be issued from January 1 through August 31).
- The permit allows climbing one or both of the towers.
- Up to 20 of the 35 available permits may be issued for these towers.

Gollum:

- Permits will be issued between September 1 and October 31 and between December 15 and December 31 (no permits will be issued between January 1 – August 31 and between November 1 and December 15).
- Only 5 of the 35 available permits may be issued for the Gollum.

Witch/Warlock/Cauldron:

- No more than one permit per day will be issued for this group of towers. The permit allows one to climb any or all of the towers.
- No more than 10 of the 35 available permits will be issued for this group of towers.
- Permits will be issued for climbing between September 1 and October 31 and between December 15 and December 31 (no permits will be issued for climbing between January 1 and August 31 and between November 1 and December 15).

Permit Administration

Initially, permits will be issued by contacting the Moab Field Office by phone; permits will be emailed to the permit holders. The Field Office may seek to set up an on-line system of permit issuance in the future.

- A permit must be in possession of the permit holder during the climbing trip,
- A permit may be requested up to six months in advance,
- A permit must be requested at least 48 hours in advance of the trip, and
- No permits will be issued on weekends or Federal holidays.

All camping activities must comply with BLM camping rules, which limit dispersed camping to designated sites in the project area (all of which are located along the Green River; there are no designated sites within Mineral or Hell Roaring Canyons).